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Hardy Fruits

and Ornamentals

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BURWOOD PLUM
FOR DESCRIPTION SEE PAGE 12

Capital City Nurseries

Des Moines, Iowa

Since 1869



A BED OF HARDY PHLOX

SEE PAGE 43

Capital City Nurseries



Front and south view of our office, showing grafting room basement, and packing house in background.



OT all the statements made in this book will directly help us sell our products, but they tell you the exact truth. If a variety has a fault or weakness in your locality, we advise you before you order; then there should be no disappointment after planting.

Many varieties of trees and plants which thrive in the seaboard or lake shore states, do not succeed in the Middle West. Even within our own state, varieties which do well in one section, may prove complete failures in another. Don't be too easily satisfied about varieties for upon your selection largely depends the success of your planting. Study the catalogue, consult the zone map or write us when in doubt. We keep our local representatives fully posted and you will do well to be guided by their recommendations.

Our nurseries are located along the south limits of Des Moines, on and around the old Watrous Homestead, where good trees and plants have been grown since 1869. Come and see us. A warm welcome always awaits you for during the growing season, our nurseries present a beautiful and interesting study, well worth your while.

Our nursery stock is kept pure and true to name. Every variety is staked in nursery and labeled before shipment. If you make a new planting and keep a record or plat of your orchard or garden, we guarantee varieties true to name or stand liable for **three times** the original purchase price.

Spring packing season begins about April 1st and sometimes extends a few days into May, depending upon the season. This is a very busy period for us and customers desiring personal attention given their orders must place same early, before the rush. Fall digging and packing commences with peonies and perennials in late September and winds up with fruit trees about October 15th.

Many items of stock succeed best when transplanted in the fall. Some stock like Tulips, Hyacinths, Narcissus and the like can be delivered for fall planting only. All hardy perennials, including peonies, **always** bloom the first season when planted in the fall. Other stock, except strawberries and evergreens, succeeds much better when received in the fall. In the south the stock should be planted at once, using plenty of water; in the north it should be buried, **root and branch**, in a pit over winter, and set out as early in spring as the ground can be worked. Following this method our customers seldom lose a tree or plant. Orders for evergreens and strawberries are accepted by us for spring delivery **only**.

Since each class of trees or plants require special cultural instructions, same

Apples—Continued

best. Even corn will do but on no account sow grass or small grain in the orchard till the trees are at least five years old.

Spray at least once each year even while the trees are young—just when the last bloom is falling—and spray directly into the flower cluster. Use Lead-arsenate (1-10). That will clear your orchard of most of the worms. Mix one-half gallon of Lime-sulphur right in with your ten gallons of arsenate solution and you will control a large part of the scab and blotch at the same time. Commercial orchardists generally spray four times each season but we figure that it is far better to spray once and win than to resolve to spray four times and fail. Borers once in a tree must be gouged out with a wire. Paint the trunks of your trees with Lime-sulphur mixed with strong soap suds, in March, May and October, for borers, rabbits and mice.

A half acre (25 trees) makes an ideal family apple orchard. Not more than five trees in the twenty-five should be summer and fall apples; all the rest good winter sorts. Select from the following list, containing the very best for the Middle West, arranged in the order in which they ripen fruit.

Summer Apples

YELLOW TRANSPARENT—Fruit roundish; pale yellow; medium size and good quality. Early and regular bearer though of short ripening period. Much subject to blight when young and therefore succeeds best on thin soil. Last of June. ABC.

EARLY HARVEST—Fruit roundish; bright straw color; medium size; white flesh, tender, juicy and crisp; poor keeper. Last of June. A.

RED JUNE—Fruit red; medium to small; flesh white, juicy, fine flavor. The finest early eating apple. Tree slow grower, good bearer, covering a rather long ripening period. Ripens with us about July 1st. AB.

SWEET JUNE—Medium size; yellow; fine quality for table and cooking. Best early sweet apple. Early July. AB.

RED ASTRACHAN—Medium to large, flattened; marbled with crimson over green; rather acid, fine flavor. July. ABC.



Same block of apples one year later.

DUCHESS OF OLDENBURG—Large, beautifully striped; flesh juicy and good, with rich sub-acid flavor. Very best summer cooking apple. Very early and heavy bearer. Early August. ABC.

BENONI—The best August eating apple, large, handsome red; deserving a place in every home orchard, north or south. August. ABC.

Fall Apples



Block of one year apple on two year roots, showing Grimes Golden in the foreground.

COLE'S QUINCE—Large, yellow and very fine. Favorite early fall eating and cooking apple. Better and much harder than Maiden Blush. August and September. ABC.

STRAWBERRY (Chenango)—Medium size; oblong; color white, splashed with red. Very fine quality. September. AB.

MAIDEN BLUSH—Rather large, smooth, regular; red cheek on pale yellow skin. Flesh white, tender, pleasant. Not hardy. August and September. A.

FAMEUSE (Snow Apple)—Medium size, roundish, bright red, some times striped. Flesh snow white, very tender and fine. Excellent for dessert and cooking. October to December. ABC.

RAMSDALL SWEET—Rather large, oblong, dark red. Best fall sweet apple, sometimes called English Sweet. October to December. ABC.

WOLF RIVER—The largest apple we grow and the poorest in quality. Red stripe, fairly good for cooking. September to November. ABC.

WEALTHY—Large, roundish, red, handsome, good quality. Best late fall apple for northern planters; good keeper in cold storage. Plant a few Wealthy, but not too many. October to January. ABC.

RAMBO—Medium size; yellow, striped with red. Fruit mild, tender, good—one of the fine old fall eating apples. September to November. A.



A Plate of Delicious Apples

Winter Apples

DELICIOUS—Fruit large; crimson, blending with yellow at the blossom end where is found the five little knobs which easily distinguish this variety. Of very highest quality and flavor but a poor keeper unless in cold storage. Tree is a free grower, hardy, but very late coming into bearing and generally a shy bearer in the middle west orchards. If you want Delicious to bear early and well, topwork on Virginia crab stock. October to December. ABC.

GRIMES GOLDEN—Medium to large; yellow; exceptionally fine quality. One of the best early winter eating and cooking apples. Subject to bark rot at the crown, often destroying the tree when in full bearing. This crown weakness may be avoided by topworking Grimes on hardy stocks. November to January. A.

BALDWIN—Fruit large, red, juicy, crisp and good. Very shy bearer and not a good keeper. November to January. A.

ROMAN STEM—Fruit medium, greenish yellow. Excellent late-keeping dessert apple. Flesh tender, juicy, rich, with pear-like flavor. Blights some. December to April. ABC.

McINTOSH—Medium size; dark red, extra quality. Especially recommended for the White Oak timber sections of the north. December to March. BC.

IOWA BLUSH—Fruit very small; red cheek on greenish yellow skin; fair quality; finest tart. November to January. BC.

MISSOURI PIPPIN—Large; bright red with gray spots; fair quality; good bearer. December to March. A.

PARADISE WINTER SWEET—Large, blushed, very sweet and fine. Best sweet winter apple in quality though not as hardy as Tolman. December to March. A.

WINTER BANANA—Large; rather flat; beautiful yellow; flavor exquisite and tempting; highest quality. The least hardy of all apple trees in nursery. December to March. South A.

JONATHAN—Medium to large; bright red, beautiful; highest quality, fine flavor. The old standard red winter apple for all the region south of the latitude of Des Moines. Tree rather slender and slow growing but a good bearer and fine winter keeper. December to April. A.

YORK IMPERIAL—Another fine red winter apple of high quality of the Jonathan type. Fruit large, red, good quality. December to April. A.

NORTHERN SPY—A fine apple but a shy bearer. Fruit large, yellow striped with red; quality very good. December to April. ABC.



Malinda

Winter Apples—Continued

✓ **MALINDA**—Most valuable in the extreme north where winter apples of high quality and sufficient hardiness, are scarce. Fruit medium, rather pointed; yellow with faint stripe; fine grained and nearly sweet. Good bearer. December to May. BC.

✓ **WALBRIDGE**—Fruit medium, fair quality, splendid keeper; rather late coming into bearing but afterwards a good annual bearer. Walbridge is one of the sorts that will soon be replaced by the valuable cross-bred, hardy apples of high quality, now being developed by the Iowa State College at Ames.

✓ **INGRAM**—A mighty fine little apple of highest quality that ought to be planted in every home orchard. Seedling of Rawl's Genet which it surpasses in size and value. One of the earliest and heaviest bearers adapted to this region, often producing apples on three year old trees in nursery row. Very fine quality, like the old Genet, and a splendid keeper. December to May. ABC.



Ingram

✓ **RAWL'S GENET**—Fruit small, striped, extra fine flavor. A good variety for the family orchard in zone A. December to May.

✓ **N. W. GREENING**—The standard and most popular apple of the north. Fruit very large, green; quality fair; extra long keeper. Becoming more and more popular as a winter cooking apple, both north and south. December to May. ABC.

✓ **PEWAUKEE**—The best hardy winter baking apple. Seedling of Duchess, therefore hardy and productive. Fruit very large, yellow splashed with red, fair quality. Should be more generally planted, especially in the north. January to May. ABC.

✓ **BEN DAVIS**—Poor Ben is losing friends every year. Its quality has always been against it and now commercial men find that it is shorter lived than most other sorts. Still we recommend planting a tree or two in the family orchard for it is a faithful bearer and may furnish a crop when other sorts fail. December to May. AB.

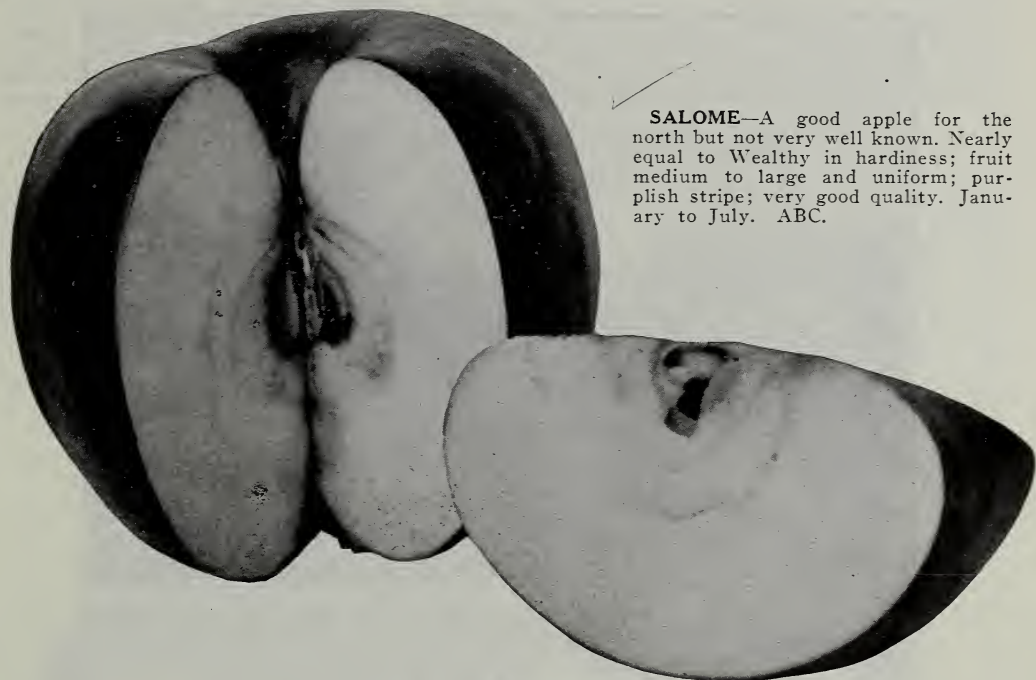
✓ **GANO**—Seedling of Ben Davis, practically identical with Black Ben; surpassing old Ben Davis a little in quality and a good deal in color, being dark red (no stripes); productive and a good keeper. December to May. AB.

✓ **MAMMOTH BLACK TWIG**—Very large, dark red; superior to old Winesap which it resembles in color, flavor and keeping quality. The fruit is rather flat; very heavy; skin rather oily late in the winter. December to May. A.

✓ **WINESAP**—Fruit large, dark red, fine quality. Tree vigorous and spreading, sometimes subject to branch splitting. December to May. A.

✓ **STAYMAN WINESAP**—Fruit very large, dark red; extra fine quality but a disappointment in many orchards on account of lack of hardiness. Ingram is not as large in fruit, but equal to Stayman in quality and superior to it in every other way for the family orchard. December to May. A.

✓ **TOLMAN SWEET**—Best late-keeping winter sweet. Fruit large, pale yellow, good quality; hardy, vigorous and productive. December to April. ABC.



Paragon

✓ **SALOME**—A good apple for the north but not very well known. Nearly equal to Wealthy in hardness; fruit medium to large and uniform; purplish stripe; very good quality. January to July. ABC.

✓ **BLACK ANNETTE**—Here's a dandy little apple for the northern family orchard to take the place of Jonathan where Jonathan lacks hardness and the cost of the Winterproof Jonathan is objected to. Fruit small, dark red underlaid with green; very fine quality. Heavy bearer; has a tenacious stem which prevents the wind from blowing off the fruit. Annette has never been boomed but is growing rapidly into favor in northern Iowa for family use. December to June. ABC.

✓ **PARAGON**—About the size of Jonathan; darker red with white specks; a very heavy, hard apple at picking time; fine quality even through the following spring and early summer. Tree hardy and a good bearer. Better keeper even than old Willow Twig. January to July. ABC.

RUSSET—We grow two Russets—Colorado Orange and Wisconsin Golden; both of high quality and especially long keepers. Colorado Orange is smaller than Wisconsin Golden but of higher quality. December to June. ABC.

Crab Apples

Plant a few—not too many.

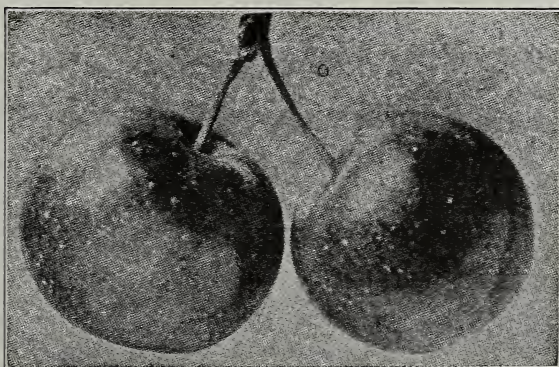
✓ **WHITNEY**—Large, early, fine for dessert or cooking; free from blight and immensely productive. Best and most popular crab apple. July to August. ABC.

✓ **TRANSCENDENT (Large Red Siberian)**—Fine for canning but so badly subject to blight that we cannot recommend it. Don't plant near other apple trees for blight spreads. August.

✓ **BRIER SWEET**—Fruit nearly as large as Transcendent; pale yellow; splashed with red; very sweet and rich. Best crab apple for preserves and canning. Plant Brier Sweet instead of Siberian crab apples. ABC.

✓ **FLORENCE**—Large, handsome, crimson, splashed with red. Practically no blight. September. ABC.

✓ **HYSLOP**—Very large, deep red; very beautiful; a little shy in bearing. If gathered early the fruit may be kept in cellar till Christmas. September to December. ABC.



Whitney



The finished apple product, showing in the foreground long rows of our famous "Winterproof Apples"—Grimes, Jonathan and Delicious topworked on hardy Virginia crab stocks.

Winterproof Apples

A Winterproof apple is not a new variety—it's a new method of propagation—topworking the best commercial varieties on the hardy Virginia crab stocks—producing a hardier, more vigorous, longer-lived and more prolific apple tree than when root grafted in the ordinary way. We make it possible for zones B and C to have just as good and as many Grimes' Golden and Jonathan as can be grown in zone A and Delicious much more productive in all zones.

The present methods of fruit tree propagation (root grafting and collar budding) have been practiced by nurserymen only during the past sixty years. Before that time, and during the whole of the first two hundred years' development of the Atlantic Coast states, orchards were started from seed. Of the millions of seedling orchard trees so planted, a very large percentage proved entirely worthless but from among them sprang all our good varieties of apples of today. Those apples were cross bred and adapted to the Atlantic seaboard where the climate is moist and equable; but many of them prove too tender or unfruitful for the more severe and changeable climate of the middle west. That's why we are without the long list of fine apples that can be successfully grown in the east. Since the early settlement of the Mississippi Valley, root grafted or budded apples have been planted in the orchards with no chance for cross breeding to produce hardier and better varieties.

But 'way back in the history of this region, before white folks settled here, wild crab apples grew along the creeks and streams, developed through a natural seedling evolution covering a thousand years, hardier than the oak. From such parentage came Virginia crab—the peer of stocks for topworking purposes.

Winterproof apples are propagated by first growing Virginia crab trees in nursery till two years old, then budding or grafting the desired commercial variety of apple in the tops of the Virginia trees, three feet above ground. The entire trunk of the Winterproof tree is the hardy Virginia crab and the entire top is Grimes, Jonathan, Delicious or whatever variety is desired. They are grown two years longer and the Winterproof tree for transplanting is then a two-year Jonathan, Grimes or Delicious on a four-year Virginia crab stem.

The great value of the Winterproof tree lies:

(1) **Greatly increased hardiness**—half hardy sorts like Grimes and Jonathan are entirely safe to plant in zones B and C. For increased hardiness we refer you to Mr. H. G. Street, Hebron, Ill., whose commercial orchard in southwest Wisconsin proves it.

(2) **Increased productiveness.** Sorts like Delicious, propagated in the ordinary way generally commence to bear the ninth or tenth year after transplanting; when worked on Winterproof stock, bear the third year. We refer to Frank Harrington of Williamsburg, Iowa, for in his commercial orchard his topworked trees have enabled him to win first prize at the national and state apple shows.

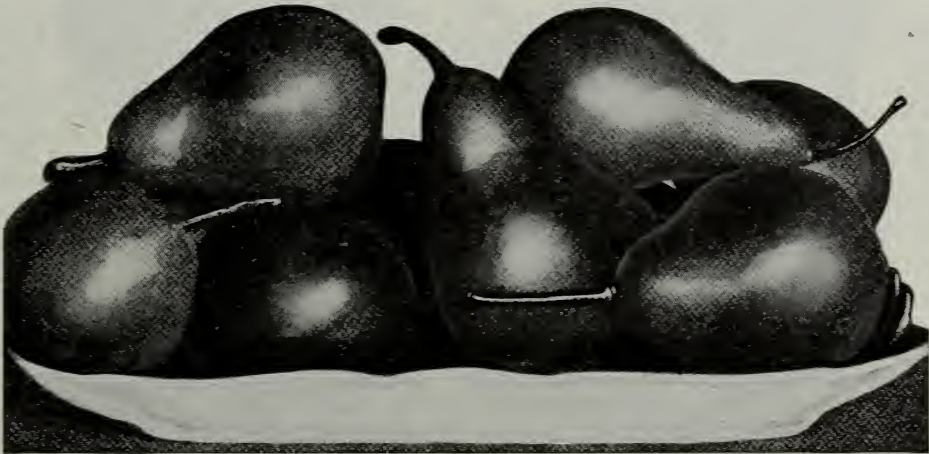
Varieties of Winterproof Apples

✓ **GRIMES GOLDEN**—Topworked on Virginia, this splendid apple, besides being much hardier in the north, is entirely free from the crown trouble so seriously effecting Grimes on their own roots all over the country. Even the commercial orchard men, planting in the most favored apple districts realize the great need for a hardy stock for Grimes. Try it!

✓ **JONATHAN**—Winterproof Jonathan can be safely planted anywhere in zones B and C, thus enabling our more northern customers to have as fine Jonathan, right in their own orchards, as our Missouri patrons enjoy.

✓ **DELICIOUS**—Whether north or south, east or west; Winterproof Delicious is well worth the additional cost because it comes into bearing much earlier than when propagated on its own roots; bears heavier; and makes this the most valuable table and dessert apple in the world.

OTHER VARIETIES, such as Winter Banana, Red June, Roman Stem, Stayman, Fameuse, can be supplied in small one year tops on three year Virginia this season, but suggest customers withhold their orders for these sorts till fall 1919 and spring 1920 delivery.



Pears

Pear trees should not be planted in rich, black soil. Under such conditions they generally blight to death before fruiting, especially when cultivated. On clay or "white oak" soil, with no cultivation after trees are established, the pear succeeds in zone A and bears good crops. Pear is far hardier than peach or Japan plum. Its greatest enemy is blight. Blue grass sod or a tangle of raspberries are better for the pear trees than the cultivator. Kieffer and Garber are hardier than the others, less subject to blight.



Our tree plow hustles six heavy teams of horses and mules but it gets the roots.

Plant pear trees twenty feet apart each way. Spray with Lead-arsenate when slugs appear on the leaves and be sure to cut out and burn at once, all blighted twigs and leaves as soon as they appear. Gather pears about two weeks before fully ripe, store them in a dark room and you have fruit of much better quality than if left to ripen on the tree.

✓ **BARTLETT**—Most popular summer pear in the east. Large, yellow, blushed in sun; rich, buttery; fine flavor. August and September. A.

✓ **BEURRE D' ANJOU**—Large greenish russet; excellent quality. One of the best late fall or early winter pears. October to December. A.

Pears—Continued

CLAPP'S FAVORITE—Large, fine fruit like Bartlett, though not so good quality; pale yellow with brown dots. August and September. A.

DUCHESS D' ANGOULEME—Succeeds best as a dwarf. Fruit very large, greenish yellow, russet spots. October to November. A.

FLEMISH BEAUTY—Large, pale yellow with red cheek; beautiful and delicious. One of the hardiest of the fine quality pears. With special care this variety succeeds in a small way in Zone B and sometimes in Zone C. October to December. AB.

GARBER—One of the Jap hybrids. Earlier

than Kieffer. Poor quality. September to October. AB.

KIEFFER—This is the great canning pear of the south and most successful of all pears in the north and on a considerable variety of soils. Fruit large, golden yellow, often blushed. October to December. ABC.

SECKEL—Small, but one of the best in quality. Very productive. Fairly free of blight. September and October. AB.

DWARF PEARS are budded on Quince stocks. Less hardy than standards but bear earlier and more abundantly. Can supply *Duchess*, *Anjou*, *Bartlett*, *Flemish Beauty* and *Seckel* in dwarf pears.

Plums

Why is it, that here in the Middle West, seventy-five per cent of the amateur fruit growers, make plum culture their hobby or special "pet" among all hardy fruits? Because, by selecting a group of seven or thirteen trees of such varieties as *Terry*, *Davenport*, *Burwood*, *Whitaker*, *Hammer* and the like, planting them in a **clump** or **cluster** twelve feet apart, they become your friends about the second summer for they will then bear early and well. Plums are surely fine eating out of hand; great for preserves and canning, and plum butter! Nothing is more appetizing and appealing, during the long winter months than plum butter! War bread plus plum butter beats wheat bread.

For your convenience we divide our plums into four groups as follows:

Americana Group

Clump planting is especially recommended for this group to insure heavy annual crops of fruit. Don't plant too many of one kind and mix varieties well in the clump for stronger cross-fertilization of bloom. An ideal clump is made by planting one *Hammer* in the center, with *Terry*, *Burwood*, *Davenport*, *Whitaker*, etc., around it, all trees set twelve feet apart. **Hardy everywhere on any soil and location.** Recommended for the village or town lot as well as the farm for they don't take much room and surely pay high "pew rent." No matter what your horticultural disappointments may have been in the past, you can at least have plenty of good native and hybrid plums.

DAVENPORT—A fine, medium sized yellow plum, originating in Iowa, parentage unknown; supposed to be a pure native but showing unquestioned cross with the prune—possibly the white prune. Bears a good crop every year. Flesh deep yellow, buttery, firm, freestone, with small prune-shaped pit; thin skin and very highest quality. Our "boys" at the nursery call it the "sugar plum" and we have a hard time to keep them away from the bearing *Davenport* trees during the ripening season. August and September. ABC.

DE SOTO—One of the old favorites. Fruit oval, medium size, orange color overlaid with crimson; many dots; yellow juicy flesh; quality good. August. ABC.



Davenport



Terry

✓ **HAMMER**—The best of the Miner sub-group. Fruit round-oval, large; red with many dots; thick skin; yellow flesh; fair quality. Trees inclined to overbear. A good fertilizer for other trees planted in the same clump. September. ABC.

✓ **HAWKEYE**—An Iowa seedling inclined to be a shy bearer, parent of the Terry which is larger, more prolific and superior to the Hawkeye in every way. August ABC.

✓ **TERRY**—Leader of all native varieties in hardiness, vigor of tree, size and quality of fruit. An Iowa seedling introduced by us in 1902. Fruit very large (five and three-quarters inches in circumference); color clear red with small white dots; thin skin. Flesh juicy, very fine quality. August. ABC.

✓ **WHITAKER**—Seedling of Wild Goose and hardier. The very best very early plum. Fruit oval, large, bright red, thin skin; flavor sweet and good. When other Wild Goose sorts winter killed a few years ago, leaving Whitaker unharmed, we dropped the propagation of all other varieties of the Chickasaw sub-group. July. ABC.

✓ **WOLF**—Another old favorite of Iowa parentage especially productive in eastern Iowa, in Illinois and Wisconsin. Oval, medium to large, red, thick skin, fair quality. August. ABC.

✓ **WYANT**—A Waterloo, Iowa, seedling that has held its own so far in competition with the newer sorts, because of its great productiveness, good size and color (red) and remarkably fine quality. Early September. ABC.

Japanese Group

Bitter experience has caused us to cut our long list of Jap plums down to two, and we don't even recommend them. They can't stand the winters north. The hot dry weather during July and August kills them in the south. Even when you succeed in getting a good crop set on the trees, too often the fruit all rots before maturity. Plant Burwood instead. Burwood is half Jap—hardy, fruitful, practically free from rot and the fruit is just as large and fine as the finest pure Japs.

✓ **ABUNDANCE**—Large, showy, beautiful fruit; bright red, very fine quality. Tree very upright growth. July. A.

✓ **BURBANK**—Large, red; flesh firm and meaty; rich and sugary. July. A.

European Group

Mostly of English origin, fairly hardy but subject to black fungus, curculio and rot in most sections. By watching closely, spraying often and removing the affected fruit as soon as it shows signs of rot, one might be fairly successful with European plums in a limited way.

✓ **GERMAN PRUNE**—Large, long oval; much used for drying; color dark purple; very fine flavor. Last of August. AB.

✓ **GREEN GAGE**—Small, greenish yellow; the best of the yellow European group but not at all comparable with Davenport for this section. August. A.

✓ **LOMBARD**—Large, oval, violet-red; juicy,

meaty, fine quality. Very productive. Last of August. AB.

✓ **DAMSON**—Small, dark purple, very productive; less rot than other Europeans. Early September. A.

✓ **TATGE**—A seedling of Lombard which it closely resembles; larger but more subject to rot than its parent. Last of August. A.

Hybrid Group

Here's the place to come for the best new plums. The Williams' hybrids are recommended for all zones; while the Hansen Hybrids, including Compass, we recommend especially for zone C—the extreme north—where they may well take the place of cherries. All the Hansen hybrids except Hanska should be trained in bush form to increase productiveness.

✓ **BURWOOD (Williams)**—The largest and best plum in America. Specimen fruit grown here measured six and one-half inches in circumference; as large and fine as the best of the pure Japs; hardy, fruitful and practically free from rot. The tree resembles a thrifty young Early Richmond cherry. Fruit roundish, very large; color yellow almost entirely overlaid with red; flesh yellowish, firm as a peach; tender, juicy and of the very highest quality. Good shipper—valuable for market. Burwood offers you the opportunity to have real California plums in your dooryard, every year. Try it Early September. ABC.

✓ **ROADSIDE (Williams)**—Being one-third English Morello cherry. Roadside has a thinner skin, with less astringency than any other plum—native, Japanese or European. When canned the skins do not destroy the rich, mellow, plum flavor. Large, round, bright red, very fine quality. "The plum without a pucker." Last of September. ABC.

✓ **RED GLASS (Williams)**—A hybrid resulting from a cross with old Quakenboss, producing medium sized blue plums of fine quality, not much subject to rot. Rather shy bearer. Not entirely hardy in the extreme north. AB.

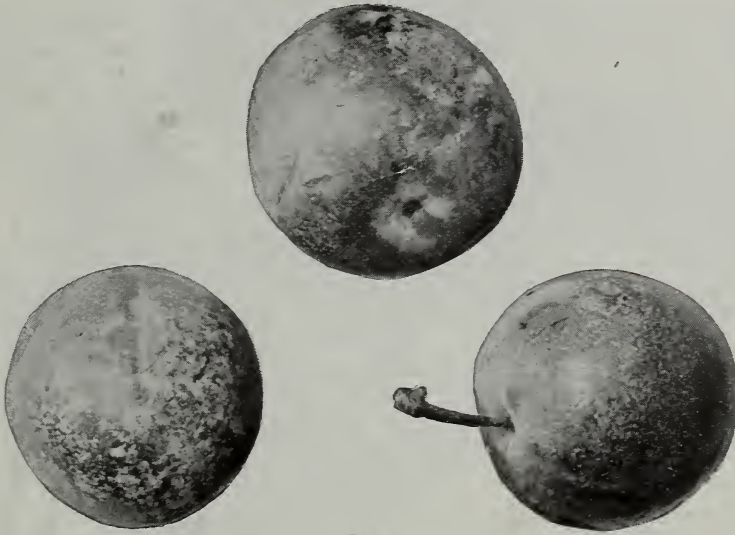
✓ **COMPASS**—Sometimes called a cherry. A cross between the western sand cherry and Miner plum. A wonderfully early and prolific



All plums have to be tied to stakes the first year to insure straight stems and to keep the wind from breaking them off at the bud union.

bearer but unfortunately Compass retains too much of the Sand Cherry flavor, making it unpalatable, except for canning. Not recommended except for the extreme north where better fruits cannot be grown. Fruit small, dark red and always abundant. Early August. C.

✓ **HANSKA (Hansen)**—Crossing native plum with Chinese Apricot. Fruit small with heavy blue bloom; flesh yellow, firm and with fine Apricot flavor. Fairly productive. ABC.



Sapa

SAPA (Hansen)—Crossing Sand Cherry with Sultan (Japanese) Plum. Fruit small, dark purple; flesh dark purple; fair quality; almost as productive as Compass. BC.

plish red; flesh green, firm and good quality. July. BC.

OPATA (Hansen)—Crossing Sand Cherry with Gold (Japanese) plum. Fruit small, dark pur-

SAN SOTO (Hansen)—Crossing Sand Cherry with De Soto plum. Fruit small, round, black; flesh yellowish green. Similar to Compass though of somewhat better quality. BC.

Cherries

If you haven't a dry well-drained soil, don't plant cherries. If your soil is well drained, plant more cherries! Being the first tree fruit on the market, there is always a big demand and at \$4.00 per bushel, you won't lose money by planting more cherry trees.



We specialize in growing large blocks of cherry—the best in the middle west.
Block of 50,000 one year buds.

Cherries—Continued

We grow the best and the most cherry trees found anywhere in the middle west. With no insects to bother and practically no disease; the cherry is the least bother and the surest crop of all tree fruits. If you watch for the first appearance of "yellow leaf" during a rainy season and spray at once with Lime-sulphur; then you will have little or no difficulty in maintaining a healthy, profitable orchard. Our cherry trees are all budded on hardy mahaleb stocks, guaranteed not to sprout from the roots. Plant cherry trees twenty feet apart each way.

Sweet Cherries

(Heart and Bigarrea)

BLACK TARTARIAN—Very large, glossy black; half tender, juicy rich and fine. Not hardy. Shy bearer. Last of June. A.

WINDSOR—Large, black; flesh firm, sweet and fine quality. Not hardy. Shy bearer. Middle of June. A.

GOVERNOR WOOD—Large, light red, nearly tender, juicy sweet and delicious. Not hardy. Shy bearer. Middle of June. A.

YELLOW SPANISH—Large, pale yellow with red cheek; flesh firm, juicy, fine flavor. Not hardy. Shy bearer. Last of June. A.

SCHLEIHAHN—The only black sweet cherry we can safely recommend for middle west planting. The original Schleihahn, imported from Europe about 1890 by Prof. Budd, stood on the campus grounds at the Iowa State College over twenty-five years, with fair crops of fruit and even survived the terrible winter of 1898-99 with only partial injury. Schleihahn is highly recommended for family planting in all parts of Zones A and B and even in Zone C where favorable cherry soil is found. Fruit large; glossy, black, juicy, rich and very fine flavor. Tree moderately productive. No other nurseryman has genuine Schleihahn. Place your orders early for the supply is limited.

YELLOW GLASS—Another fine sweet cherry of the Schleihahn type except color of fruit (yellow) imported by Prof. Budd direct to Ames about the time of Schleihahn. Large, perfect specimen trees of Yellow Glass twenty-five years old are found at Des Moines and at Sigourney—sound, healthy and productive. Neither Yellow Glass nor Schleihahn are new untried sorts. Both have stood the test in Iowa for more than twenty-five years. AB.

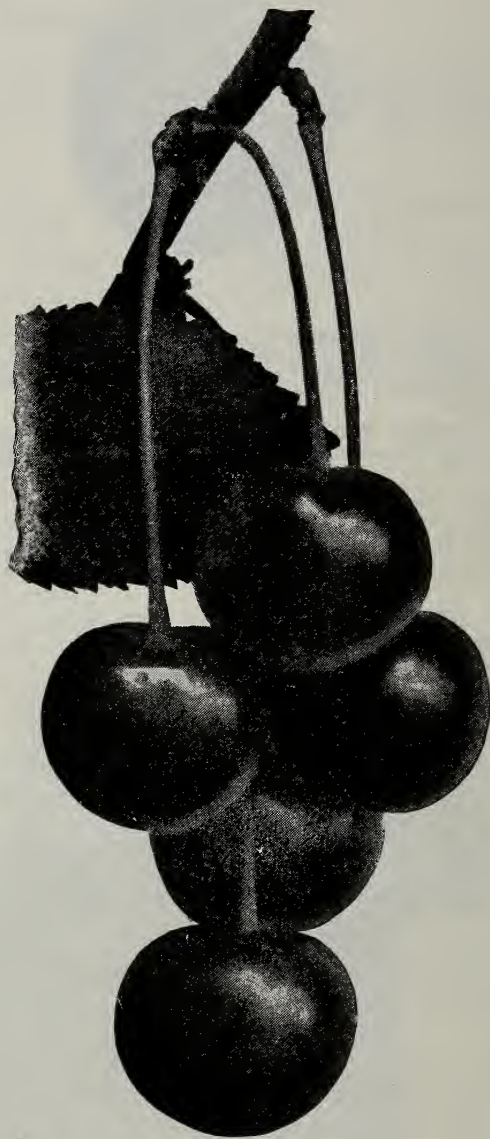
Sour Cherries

(Duke and Morello)

DYEHOUSE—Very much like Early Richmond; a little earlier but not so productive. Early June. AB.

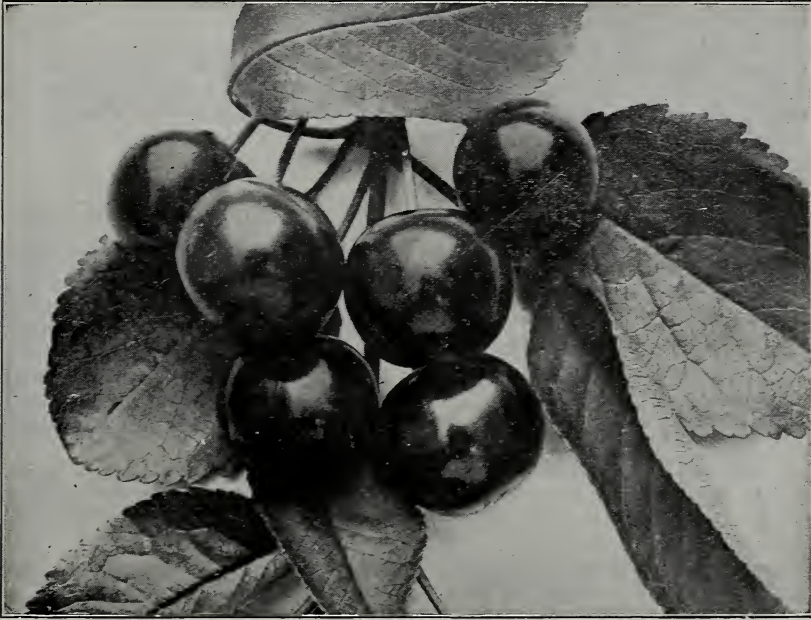
EARLY RICHMOND—Medium to large, red, early, good quality. Tree very hardy, immensely productive. Stick to Early Richmond for the bulk of your cherry planting. Middle of June. ABC.

MONTMORENCY—Larger and more solid than early Richmond; light red. Ripens ten days later. Tree a very upright grower and inclined to be a shy bearer unless the leaders are pinched or pruned when the tree is young, to induce a more open and spreading top. Last of June to early July. ABC



Schleihahn

MORELLO (English)—Large, late, nearly black, tender and juicy. Best cherry for preserves. Tree slow grower but very productive. Not recommended for the black soil region of northern Iowa. Early August. AB.



Early Richmond

NORTHWEST (Baldwin)—Five days earlier than Richmond. Fruit large, very dark red, with firm red flesh of very fine quality. Tree more vigorous than Richmond though not as heavy bearer. Early June. ABC.

OSTHEIM—Fruit medium size, almost black when fully ripe; juicy, rich, almost sweet. Last of July. ABC.

TIMME—Northern planters are advised to plant Timme instead of Early Richmond. Timme is undoubtedly a seedling of Early Richmond, resembling it very closely in tree, fruit and

season, but is more productive and longer lived in the north. Our propagating stock came from the Iowa State College, from full grown trees, just north of the Chemistry Building. Recommended by the College as "Better than Richmond for the north" and you can have implicit confidence in their recommendations. It has been fruiting for many years on the black soil of the College Campus where Early Richmond did not always prove satisfactory. Middle of June. ABC.

WRAGG—Identical with English Morello.



Another fine block of cherries, coming two years old this fall.

Peaches

Don't stop planting peaches simply because the past few winters have been unusually severe. The same winters killed fall wheat, alfalfa, clover and other agricultural products. Even in zone B peach trees should be planted for family use. You can have home grown peaches nearly every year if you heed the following advice:

(1) Plant a few peach trees every year—on the poorest, highest land in the orchard.

(2) Train peach trees low; cut them back to a stub at planting time, and keep the tops low and open.

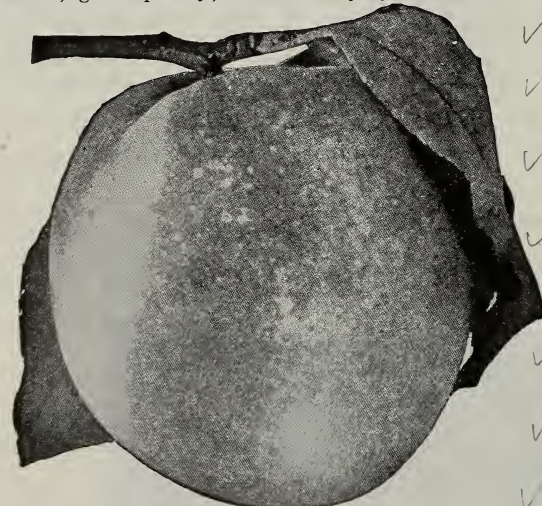
(3) Don't cultivate after the first year. The reason the peach is not as hardy as the apple is that it starts out too early in the spring and grows too late in the fall.

(4) In the fall, just before ground freezes, bank earth around your peach trees, as high as possible. Then even if the winter kills the tops, there is no injury below your bank and by cutting back to sound wood, you don't lose your tree nor your crop.

Plant peach trees fifteen feet apart or use them as fillers between other young trees in the orchard. Very little trouble with insects or diseases on peach trees in this latitude.

✓ **ADMIRAL DEWEY**—A fine early freestone; large, yellow and crimson, yellow flesh; fine quality. Early July. A.

✓ **ALEXANDER**—Hardest of the early peaches; medium to large, greenish white with deep red flesh; good quality; freestone. July. AB.



Champion

✓ **BANNER**—Fruit large, deep yellow with crimson cheek; flesh yellow, rich and firm. September. A.

✓ **BOKARA**—Medium size; yellow and red; freestone; good quality and keeper. Very hardy fruit bud. One of the safest for northern planters. AB.

✓ **CARMAN**—Fruit large, yellow and white, attractive. Flesh white, spicy and good. Heavy bearer. Late July. A.



Nursery visitors often express surprise at our large blocks of peach but our southern customers are well acquainted with the high value of northern grown peach trees.

back to sound wood, you don't lose your

✓ **CHAMPION**—Very large, creamy white with red cheek; sweet, juicy, very high quality. Fruit a little soft for distant shipment but in our judgment the hardiest and most reliable peach for the north. Ranks first for home planting. Early August. AB and parts of C.

✓ **CRAWFORD EARLY**—Large, yellow with red cheek; flesh yellow and melting; excellent quality. Freestone. Early August. A.

✓ **CRAWFORD LATE**—Large, yellow with dull red cheek; flesh yellow, quality good. Freestone. September. A.

✓ **CROSBY**—Medium to small, bright yellow, streaked with red; good quality; heavy bearer. One of the extra hardy for northern planting. September. AB and parts of C.

✓ **ELBERTA**—Strong, stocky tree, very productive. Fruit large, yellow with red cheek; fair quality. The leading market variety in zone A but too tender for B and C. Early September. A.

✓ **FITZGERALD**—Hardier and more reliable than Elberta in the north. Resembling Elberta in size, color and quality. Early September. AB.

✓ **HEATH CLING**—Large, oblong, white; flesh white, cling, good quality. Middle September. A.

✓ **MAYFLOWER**—Earliest of all. Good color, size and quality. Early July. A.

✓ **MIXON**—Large, yellow and red; white flesh; rich and good. Cling. Late September. A.

✓ **STUMP**—Very large, white with red cheek; flesh white, good quality. Freestone. Early September. A.

✓ **TRIUMPH**—A fine early peach for family use. Large, yellow and red. Middle of July. A.

✓ **WONDERFUL**—Very large, yellow and red; flesh yellow; firm and good flavor, red pit, freestone. Good keeper. Early October. A.

Apricots

If you can't have peaches, plant a few Russian Apricots. Plant twenty feet apart.

ALEXANDER—(Russian.) Fruit large; yellow, flecked with red; flavor sweet and delicious. Early July. ABC.

BUDD—(Russian.) Medium, yellow and red; good quality. Plant with Alexander. July. ABC.

MOORPARK—(Chinese.) Large fruit with orange skin; flesh yellow, juicy and delicious. July. A.

ROYAL—(Chinese.) Large, yellow, juicy, rich and good. Plant with Moorpark. July. A.

Quince and Nectarine

Not sufficiently hardy to grow in nursery here. Can generally supply Champion Quince and Bos-

ton Nectarine to our customers in the extreme south of zone A.

Mulberries

American Mulberries are a failure with us. They kill during the extreme heat of summer as well as the dry, cold winters. In small, scattered areas they have been known to succeed fairly well but generally we cannot recommend them. The best varieties of American Mulberries are Downing and New American.

Russian Mulberry, on the other hand, are in great demand and have great value to the mid-west planter not too far north. Largely used for screens and windbreaks; timber for posts and most popular to offer attraction to native birds, keeping the birds away from the more valuable fruit.

Small Fruit Department



IN NO part of the United States is there a better outlook for big profits from small fruits than in Iowa and her adjoining states. Although questions have sometimes arisen as to the advisability of commercial orcharding in the upper Mississippi Valley, no one ever doubted the value of small fruit plantings. We have the nearby market that most bush fruits require—a market that pays the best price in the country. The returns from small fruits come quickly, commencing the second season after planting and will take care of expenses, interest and taxes while the fruit trees are coming on.

Grapes

All of us who cannot have peaches and quinces, may have grapes, for with our deep soil, bright sun and dry air, grapes attain their highest perfection.

Plant grapes deeply, eight feet apart, south slope where possible and prune severely every year, early in March. Never prune grapes after the frost is out in spring.

AGAWAM—Light red berry of good size; quality vinous and refreshing. One of the strongest growers—the best red grape for the middle west. Last of August. AB.

BETA—A northern seedling, crossed with wild grape and recommended only for the extreme north where the larger and finer grapes cannot be grown. Small berries on rather large bunches; blue; quality about midway between Concord and the common wild grape. C.



Concord

Small Fruit Department—Continued

✓ **BRIGHTON**—A fine red table grape, though less hardy and fruitful than Agawam. Middle of August. A.

✓ **CAMPBELL EARLY**—Very large, fine grape of the Worden type; larger and earlier than Moore Early, though not quite as hardy. Clusters large, berries large, black, thin skinned and of very highest quality. Early August. AB.

✓ **CONCORD**—Nearly black. Bunches and berries large and handsome. Most vigorous and productive grape grown. Quality, when fully ripe, very good. Fine for table, canning and for Grape Juice. If you have room for only one variety, by all means plant Concord. September. ABC.

✓ **MOORE DIAMOND**—Earliest white grape. Large bunches and berries; fine for dessert. Late August. A.

✓ **MOORE EARLY**—Ranks next to Concord in value for both home planting and commercial vineyard. Less vigorous and fruitful than Concord but earlier and somewhat finer quality. Middle of August. ABC.

✓ **NIAGARA**—The hardiest white grape. Bunches large, berries medium to large; pale yellow; thin skin; sweet and pleasant. September. ABC.

✓ **POCKLINGTON**—Bunch medium, berry large, golden yellow, very fine quality. September. AB.

✓ **WORDEN**—A seedling of Concord, larger, sweet and earlier than its parents, but not so vigorous and prolific. Maturing a week to ten days ahead of Concord, it always brings a good price on the market. Middle to last of August. ABC.

Gooseberries



Pearl

Fifteen years ago our big plantation of fruiting gooseberries and currants made us money at \$1.00 to \$1.20 per bushel. Now they are worth \$3.50 to \$4.00 per bushel. Plant more gooseberries and currants for they are sure croppers, entirely hardy, free from disease, highly profitable. Anyone in most any soil can grow them. Plant four feet apart, cultivate the same as the vegetable garden and give them a good dressing of manure occasionally. The ideal war garden is enclosed by gooseberry and currant hedge, saving space and making the fence pay more than the garden. Watch for worms (Caterpillars) in April and May. Give them a little lead arsenate, regular formula and they will not bother you any more.

European varieties have been eliminated from our list because first, they are badly subject to mildew and not as profitable as the American sorts and, second, it is difficult now to import the European gooseberries.

✓ **CHAMPION**—An Oregon seedling. Large, fruitful and of good quality. Try it. ABC.

✓ **DOWNING**—One of the best of the white gooseberries. Large fruit, heavy bearer, fine flavor; vigorous and productive. Not valuable when ripe. ABC.

✓ **HOUGHTON**—Medium to small berry but the most prolific of all and the easiest to pick. Thin skinned, red when ripe, highest quality; best for preserves. ABC.

✓ **PEARL**—Slightly larger than Downing which it resembles very closely. Fine for canning. Not valuable when ripe. ABC.

fully ripe; fine for preserves, and for table use. ABC.

✓ **RED JACKET**—Larger and finer than Houghton, its parent. Vigorous, productive; red when

✓ **SMITH'S IMPROVED**—Another Houghton seedling of the red-berried type. Larger but less prolific than Houghton. ABC.

Currants

There is no jelly near as good as currant-raspberry. Be sure to have enough currants in the garden for home use—plant for profit too—it's a safe investment. They will do well in partial shade, between trees, along the garden fence, or, may be planted as a hedge between the lawn and the garden. For market, plant four feet apart and enrich annually with rotted manure.

✓ **BLACK NAPLES**—Best black currant. Esteemed by some for jellies but we greatly prefer the red kinds. ABC.

✓ **CHERRY**—Large red berry on short bunches. Slow grower. Must have partial shade or subject to leaf-burn during July and August. BC.

✓ **FAYS PROLIFIC**—Another large red berry on rather short bunches, that cannot stand our mid-west summers. When the leaves burn in summer, it discourages fruit bud production for next year's crop; therefore not productive. BC.

✓ **LaVERSAILLES**—The berries are small but the bunches are large and there are always lots of them. Fruit light red. Severe pruning of old wood increases the size of the berry and makes it more valuable. ABC.

✓ **PERFECTION**—An unusually large red berry on good sized bunch; of the Fay type but better able to stand the hot summers. Fine for table use and promising for market, as soon as plants can be grown at lower cost. ABC.

✓ **POMONA**—Our choice of all red currants for both home use and market. Large berries, full bunches of good size; bright red, small seeds, very sweet and fine quality. The leaves endure our hot sun. Very productive. Plant more Pomona. ABC.

✓ **VICTORIA**—Large, dark red berries on long bunch which hangs on well. Bush vigorous and productive. Prune annually to keep an open bush and thereby increase the size of the fruit. ABC.

✓ **WHITE GRAPE**—Very large white berry on long bunch. Productive, fine quality. The best white currant for home use. Not popular on market on account of color. No leaf injury. ABC.



Pomona

Raspberries

Naturally we are enthusiastic about raspberry culture. Our five-acre raspberry plantation pays the biggest dividend in the nursery and I do not believe there is forty acres in the state, devoted to general agriculture, that pays better than our five acres of raspberries.

One of the most palatable of all fruits, with no waste or extra work in canning; producing good crops every year; and surplus fruit selling on the market at \$6.00 to \$6.50 per crate—you will find a small raspberry patch a mighty profitable investment for you.

The plants are hardy, being commercially grown as far north as St. Paul and Minneapolis; it is of easy culture, succeeds on any well drained soil. Should be planted **very shallow** three to four feet apart in rows seven or eight feet apart. Cultivate sparingly and never cultivate deeply for the roots are just below the surface of the ground. Allow the weeds to grow after the fruit is picked, for they will not hurt the plants and offer good winter protection. If mulched with straw early in June to conserve moisture, the last picking will be as plump and good as the first. The wood which fruited this year should be cut out and burned at once after the last picking. The ideal place for raspberries is between the rows of young fruit trees in the orchard.



A poor picture of a mighty fine raspberry patch. This five acres pays out more real money than any forty acres of grain in Polk County.



Cumberland

COLUMBIAN—Purple. No sprouts. Vigorous canes, very much like Haymaker. Early July. ABC.

✓ **CUMBERLAND**—Black. No sprouts. The best black cap. Largest berry ($\frac{7}{8}$ inch diameter); most productive; stands shipping well. Highly recommended. Early July. ABC.

✓ **CUTHBERT**—Bright red. Sprouts from roots. Hardest and best of the light red raspberries. Should be planted at the end of the garden where sprouts can be better controlled. Plow often and deeply, keeping the sprouts out of the middles between the rows and you will have good crops. Middle July. ABC.

✓ **GREGG**—Jet black; no sprouts; hardy, vigorous and productive. Same season as Cumberland and nearly as valuable. ABC.

✓ **HAYMAKER**—Purple. No sprouts. Our choice of the purple class. Strong canes; hardy and very productive. When ripe the fruit is purple; when canned is rich dark red and highest flavor of all raspberries. Early July. ABC.

✓ **KANSAS**—Black. No sprouts. Earliest black cap. Recommended where early berries are desired; otherwise not as good as Cumberland and Gregg. Latter part of June. AB.

✓ **OLDER**—Black. No sprouts. Claimed to be the hardest black cap. Fruit fair sized but a little soft for shipment. Early July. ABC.

✓ **Scarff**—A Gregg seedling and claimed by the originator to be superior but we have not found it so. Fruit about the size of Gregg and much like it except not as sweet. Early July. ABC.

✓ **ST. REGIS (Everbearing)**—Fruit red. Sprouts from roots. A bright red raspberry of the Cuthbert type, except that the fruit is formed on the current seasons growth, producing a scattered crop of fruit continuously from June till September. ABC.

Blackberries



Snyder

The demand for this fruit has been greatly on the increase. Now is a good time to plant. Set them four feet apart in rows eight feet apart. Plow deep and often and keep the middles between the rows clear of sprouts. A good dressing of manure every winter will greatly increase the yield. All blackberries sprout from the roots. Succeed on any fairly well-drained soil.

✓ **ANCIENT BRITON**—Hardy, vigorous and healthy. Fruit large and of fine quality. ABC.

More planted than all others combined. Vigorous, productive, sweet and good. Extremely hardy. ABC.

✓ **EARLY HARVEST**—Earliest blackberry. Not hardy north. Rather dwarf grower; productive; fruit medium size; good quality. A.

MERCEREAU—Claimed to be the hardiest of all. We find the fruit larger and of finer quality than Snyder though not quite as productive. We consider Mercereau a good blackberry for family use.

✓ **SNYDER**—The best commercial blackberry.

Strawberries

Any good garden soil will grow fine strawberries. Sandy soil, well enriched is ideal. We deliver strawberry plants in the spring only—summer and fall shipments in this region are not generally successful.

We have eliminated from our list all varieties of strawberries which do not fertilize their own bloom as we now have many fine perfect sorts. Plant two feet apart in rows four feet apart. Mark each row by placing a small stake at the end. As soon as fruit is picked, mow all the tops off, plow up the bed, leaving only a four to six inch strip of young plants at one side of the original row. Following this method year after year, you always have a young bed and lots of good fruit. Never allow the plants to run together into a solid bed for it is hard to keep clean and you get very little fruit except around the edges.

After the ground is frozen, say November 15th, mulch the plants with straw clean of weed seeds. Marsh hay or any clean litter will do. In the spring, rake this from the rows, leaving it between the rows to keep the fruit clean and to prolong the fruiting season. Fall bearing varieties should have all bloom removed till June 15th to secure the best late summer and fall crop.

Strawberries — Continued

Spring Bearing Varieties

AUGUST LUTHER—One of the best early berries for this region. The fruit holds out well during the picking season; is uniform; medium to large; dark red; firm and good quality. ABC.

DUNLAP—The big commercial strawberry of the middle west. Strong grower, enormous bearer; fruit large, conical, dark red; flavor sprightly and delicious. Commences to ripen after the earliest and continues to fruit until the late sorts are about gone. If you only plant one variety of spring bearing for home use (and that's enough) choose Dunlap. ABC.

GLEN MARY—Another strong, vigorous grower of the Dunlap type. Fruit is slightly larger than Dunlap, mid-season, productive but requires more moisture for a big crop than the Dunlap. ABC.

PRIDE—A fine dark red, large, oblong berry produced on a vigorous healthy plant. Commercial growers about Des Moines rank this second only to Dunlap in value. Mid-season. ABC.



Pride

Fall Bearing Varieties

After trying a number of different sorts, all highly praised by the introducers, we have cut our list down to two varieties. Except in the north, we do not look to see the fall bearing varieties commercialized, since their formative and early fruiting period comes right in the midst of our annual July and August drouth. As a novelty for home use and for local markets in the north, we recommend them highly.

SUPERB—One season only, since we have been fruiting fall bearing strawberries, has Superb equalled Progressive. That was in 1915 when we had plenty of rain all summer. Further north, or under irrigation, Superb is as valuable as Progressive. ABC.



Dunlap

PROGRESSIVE—The best of the fall bearing sorts. Healthy, vigorous and fairly productive. Stands the hot, dry weather better than the other sorts. Fruit deep red, medium size, very high quality. ABC.

Miscellaneous Small Fruits

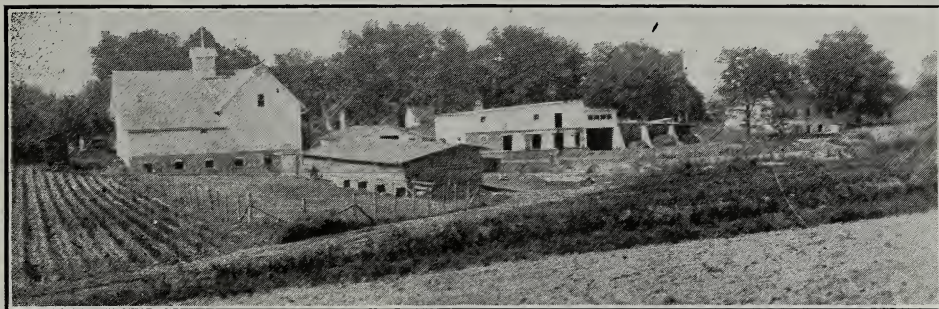
ASPARAGUS—Fall is the best time to plant Asparagus for quick results, though spring planting will do. Dig a narrow trench at least ten inches deep; fill the bottom with three inches **well rotted manure**; cover this with two inches black surface soil in which plant the Asparagus, leaving the trench open till the plants grow out. If planted in the fall, fill the trench with manure which should be removed in March. Set plants one foot apart in rows three feet wide. Conover's Colossal is most universally planted though Palmetto is also very fine for home use. ABC.

LUCRETIA DEWBERRY—The trailing blackberry. Fruit larger and sweeter than the blackberry; very productive, though somewhat difficult to pick. Should have slight winter covering in all sections. ABC.

DWARF JUNE BERRY—Fruit in clusters; blue-black when ripe. Sometimes called Huckleberry. Fine for canning and for birds. ABC.

RHUBARB—Easiest culture. Just what we need in spring for pies and sauce to thin our blood. Great medicine. Makes fine wine, too. We grow two kinds—Victoria, the tall, coarse, pink colored stems; and Linnaeus, called Wine-plant, stalks smaller, more tender and very fine quality. Victoria is best for market and most productive. Both entirely hardy. ABC.

Ornamental Department



Capital City headquarters. Room enough in the packing house to keep everything pure and true. Best facilities for handling stock without exposure.



DURING this period of the great struggle in Europe when our nation is working as one man to produce food and war materials; let us not overlook the flowers and the beautiful things in nature, so necessary to keep our hearts and minds true and so productive of good cheer and happiness to the homecoming sick and wounded fighters. When our boys come home from war they will be hardened to sights of death and suffering and nothing will bring them back to the high plane of peaceful citizenship so completely as their daily association with flowers and other finer elements of life.

Shall we banish the flowers from our gardens? As well cut out the music from our war program! Flowers are for solace in the serious work of producing more food. War is sad business, causing loss and anxiety in almost every home. Our greatest comfort lies in cultivating our love for flowers and in them find real companionship. The heart will find spare moments for flower culture. Keep the home gardens blooming.

Many of the fine flowers of the East, together with a great majority of the recent introductions from Japan and China, can be successfully grown in this region. These in addition to our fine lot of natives, give us a wealth of material without risking the half hardy and wholly tender exotics, most of which we have left out entirely.

Don't litter the lawn with trees and shrubs. Plant generously about the house foundations, especially at the corners and angles; select a few shrubs for the corners of the lawn; just enough trees for an open, shady yard; and devote the rest of your ornamental gardening time **TO A BORDER**—whether it be large or small—by all means have a border.

For border planting (party line fences, alley screens, hiding unsightly objects or in dividing the lawn from the garden) use a few tall, upright growing shrubs like Lilac, Mock Orange, Honeysuckle, Elder, Dogwood, Viburnums and the like for background; plant in front of them Barberry, Hydrangea, Snowberry, Spireas, etc. Leave plenty of room in front of the shrubs for peonies and perennials. Then you have a hedge of beauty, summer and winter, with a succession of color and bloom from April till November. Customers interested in extensive border planting, will please write us. We shall be glad to help you.

In the East, much of the planting of ornamentals, especially peonies, perennials, native trees and shrubs is done in the fall. Here in the middle west both fall and spring planting is done, though fall planting of most stock is very satisfactory. Evergreens, however, can be transplanted in the spring only.

Shrubs which grow large and spreading should be planted at least three feet apart; trees for shade, 25 to 50 feet. Foundation planting should never be in straight rows. Let the shrubs appear more natural by planting in clumps, grouping varieties of similar foliage; always planting the taller growing varieties in the background, underplanting with dwarfs or spreading shrubs. Planting and pruning directions are much the same as in the fruit department. In pruning

Ornamental Department—Continued

ornamentals, do not destroy the natural habit of the tree or plant, for instance, never cut the leader out of the Cut-leaved Birch and do not shear the tops of Spirea, Snowberry and other shrubs of graceful drooping habit. The best time to prune shrubs already established is immediately after the blooming period.



No better place in the country to get Cut-leaved Weeping Birch. Big fellows at the left and young birch coming on, at the right.

Deciduous Ornamental Trees

Unless you go into the woods a year before-hand to trench around the trees you want; thereby developing a better system of fibrous roots; you will be disappointed with timber dug shade trees. Nursery grown shades are frequently transplanted to produce a good root system; are cut off just above the ground when two years old, to form a fine straight stem. Later the tops are "stubbed" to get a heavier stem and a more shapely and better proportioned tree. Our shade trees are in demand among other nurserymen on account of their uniformity and good roots. For your convenience, varieties are listed in the order of their common names.

***ASH, WHITE (*Fraxinus americana*)**—A quick growing hardwood that middle west planters are overlooking in their haste for hard and Norway maples. Its rather narrow leaves and open habit make it a very handsome tree, especially recommended for street and park planting. You can have good sod of blue grass under your ash trees. ABC.

BIRCH, CUT-LEAVED WEEPING (*Betula alba laciniata*)—The most graceful and handsome tree for ornamental lawn planting. Erect, with drooping branches; rapid growing; extremely hardy; delicately cut foliage and handsome white bark for winter effect, it ranks beyond question the finest weeping tree in North America. Especially attractive with a background of evergreens. ABC.

BIRCH, EUROPEAN WHITE (*Betula alba*)—Strong growing, spreading habit; handsome white bark; a very desirable shade tree. ABC.

***BOX ELDER (*Acer negundo*)**—A rapid growing shade tree, often planted but in our judgment the least desirable on account of worms and caterpillars which badly infest it. Not recommended for either lawn or street planting. ABC.

BUTTERNUT (*Juglans cinerea*)—A fairly rapid grower especially prized for its wholesome, highly palatable fruit. Limbs subject to breaking down. Not recommended for shade planting in lawn or street. ABC.

CATALPA BUNGEI, or Umbrella Catalpa—A dwarf bushy form grafted six feet high on hardy catalpa stems growing a uniform umbrella-shaped head without pruning. Leaves large, heart-shaped, deep green; lying like shingles on a roof; always symmetrical. Should be planted only for formal effect. Not hardy north. A.

***CATALPA, WESTERN HARDY (Catalpa Speciosa)**—Rapid, upright and symmetrical in growth. Large green leaves; fragrant white flowers in May or June; a desirable street tree though more often planted in groves for posts and timber; the wood possessing a fine grain and wonderful durability. Entirely hardy in zone A. Recommended for the north only when planted in mixed groves containing Ash, Maple, Mulberry, Poplar or other deciduous trees. ABC.

CHESTNUT, HORSE (Aesculus hippocastanum)—Trees of elegant habit, fine foliage and great spikes of flowers in May and June. Leaves subject to sun scald; therefore very difficult to transplant. Our native Buckeye (*Aesculus glabra*) is more satisfactory. BC.

CHESTNUT, SWEET (Castanea dentata)—A fine variety but extremely difficult to grow in the middle west. Subject to blight in summer and winter injury during severe weather. In a few isolated spots, Sweet Chestnut succeeds and bears fruit, but for general planting we cannot recommend it.

ELM, AMERICAN WHITE (Ulmus Americana)—The noble, spreading, drooping tree of our own woods. Too well known to require description. Fine for park and street planting and for the lawn, too. Plant more Elms. ABC.

ELM, CAMPERDOWN WEeping (Ulmus montana pendula)—The hardiest and most reliable headed tree. Very spreading. Heavy foliage and very dense top. Very fine for the corner of the garden to shade a rustic bench. ABC.

ELM, SCOTCH (Ulmus scabra montana)—More upright in growth than the American Elm, with broader, coarser leaves, making more dense shade. ABC.

HACKBERRY (Celtis occidentalis)—Its light green, glossy leaves and horizontal branches give it a wide, elm-like head. Fairly rapid growth. ABC.

HAWTHORNE (Crataegus coccinea)—A very pretty, dwarf tree with horizontal branches; bright glossy leaves, white flowers in May followed by scarlet fruit in autumn. ABC.

KENTUCKY COFFEE TREE (Gymnocladus canadensis)—Its tall, twigless branches, rough bark; pinnate leaves of bluish-green and long racemes of white flowers in early summer, give this variety great value, especially when planted in the corner of the lawn devoted to Sumacs, Tamarix and other fine-leaved shrubs. ABC.

LINDEN, AMERICAN, or Basswood (Tilia Americana)—A rapid growing, well shaped, large native tree with broad, deep green foliage and fragrant summer flowers. One of the finest native shade trees. ABC.

LINDEN, EUROPEAN, or Linn (Tilia Europaea)—Smaller leaves and more pyramidal habit of growth. ABC.

***LOCUST, BLACK (Robinia pseudacacia)**—A native tree of large size and rapid growth. One of the best and hardest for timber and posts when borers are kept under control. Not recommended for street or lawn planting. It sprouts. ABC.

MAPLE, NORWAY (Acer platanoides)—More rapid growing than Hard Maple; leaves darker and more brilliant in fall. Tree grows very dense, discouraging blue grass; therefore not recommended for the lawn. Fine for street and park planting. ABC.

MAPLE, RED-LEAVED (Acer platanoides Schwedleri)—A sport of Norway Maple which it resembles closely except that all the new leaves are bright purplish red. Very attractive at all seasons, especially in the spring, its gleaming red and purple contrasting brightly with the delicate green of the surrounding trees. In mid-summer, the leaves turn purplish green; in autumn, golden yellow. ABC.



A fine specimen Norway Maple along the path leading from the car line to our office.

***MAPLE, SOFT OR SILVER (Acer dasycarpum)**—Of great value where quick shade is desired. Very hardy and easily transplanted. A favorite among deciduous windbreaks. If tree is topped back severely the third year after planting, its greatest fault—breaking branches—is controlled. ABC.

MAPLE, WEIR'S CUT-LEAVED (Acer Weiri laciniata)—A soft maple with remarkably dissected foliage and slender, drooping branches, giving it a very quieting and graceful effect. Bark smoother than Soft Maple and branches less brittle. ABC.

***LOCUST, HONEY (Gleditsia triacanthus)**—Rapid growing native with large, undesirable spines or thorns. We do not recommend it for lawn or hedge planting. Often used in landscape work for foliage effect. ABC.

MAPLE, HARD OR SUGAR (Acer saccharinum)—Very slow growing native hardwood of fine form and foliage. Leaves turn yellow and bronze in fall. When full grown it makes shade so dense that blue grass cannot live under it and we have ugly, bare spots in the lawn. Plant White Ash and save your lawn. ABC.

Deciduous Trees—Continued

MOUNTAIN ASH, EUROPEAN (*Sorbus aucuparia*)—Fine, hardy, medium sized ornamental tree of great value. Should be more universally planted. Its smooth, greenish-yellow bark, round head and finely pinnate leaves alone make it valuable; while the clusters of bright orange-red berries during the fall and winter make it most attractive. ABC.

MOUNTAIN ASH, OAK-LEAVED (*Sorbus hybrida*)—Handsome tree of erect habit and rich green, oak-shaped leaves, deeply lobed. ABC.

MOUNTAIN ASH, WEeping (*Sorbus aucuparia pendula*)—A freak, with twisting downward growing branches from graft placed five or six feet above the crown of the European Mountain Ash. No grace, no beauty, no particular value in our opinion. ABC.

MULBERRY, TEA'S WEeping (*Morus tartarica pendula*)—Forms a perfect, umbrella shaped head with long slender branches drooping to the ground. Should be used only as a center plant in circular drives, round or oblong beds, or other similar special places. AB.

OAK (*Quercus*)—Good health is rarely appreciated until we have lost it. So with the Oaks. Here in this comparatively treeless region we were originally blessed with many fine Oaks. They are rapidly being cut down and destroyed—in cities to give building room; on the farm to make posts, mine props and fire-wood. Old age will find our young people without this great natural endowment and they will not bless us for the loss. Let us by all means plant a few Oaks. We are trying to do our part by growing twice transplanted Oaks with tap root discouraged and lateral (fibrous) roots highly developed. Such oaks stand transplanting well. Let us preserve for posterity and for our own declining years one of the greatest tree comforts in the middle west.

OAK, BLACK (*Quercus velutina*) (*tinctoria*)—Tall, shapely, round topped head. Dark, shining leaves turning yellow and dull red in fall. We have to be very careful with Black Oak for it is highly sensitive and is most difficult to transplant. Try some of the other oaks first. ABC.

OAK, BURR OR MOSSY CUP (*Quercus macrocarpa*)—We consider this excelled only by the Pin Oak for ability to withstand transplanting and adaptability to various soils and locations. Makes a very large, open-topped tree, good fall coloring and moss-fringed acorns. ABC.

OAK, PIN (*Quercus palustris*)—Best of all Oaks for transplanting and ability to adapt itself to a great variety of soils and conditions. Almost pyramidal in habit. Grows faster than any other Oak. Leaves, deep green, glossy, fully divided; turning to handsome orange-scarlet in fall. Highly recommended. ABC.

OAK, RED (*Quercus rubra*)—Beautiful Oak of rapid growth; large; majestic; with unusually broad, round head. Foliage turns brilliant red in fall. ABC.

OAK, SCARLET (*Quercus coccinea*)—A Red Oak hybrid of more open growth; leaves more deeply divided; more brilliant fall coloring but a little more sensitive than its parent. Should have well drained soil. ABC.

OAK, WHITE (*Quercus alba*)—Very stout, spreading branches forming open head; leaves broad, undivided, turning to deep red or violet purple in fall. Give White Oak plenty of room, for it develops into one of the biggest and noblest trees in America. ABC.

OLIVE, RUSSIAN (*Eleagnus augustifolia*)—Leaves dark olive green above and silvery gray

beneath. Very striking and attractive dwarf tree. Used largely for hedging, especially for high, background screen, where it ranks first in value. Blooms profusely in June; racemes three inches long; very fragrant. ABC.

***POPLAR, CAROLINA** (*Populus deltoides*)—The quickest growing shade tree in the middle west. It is nothing unusual to see a single season's growth of twelve to fifteen feet in well established young trees. If quick shade, and at the same time, something more permanent is desired; plant Poplar forty to fifty feet apart and between them plant Ash, Elm, Maple, Linden, or whatever you like. Then later, when the slow growing shades need more room, cut out the Poplar. Large glossy leaves, much like Cottonwood, except that Poplar is absolutely sterile, never producing the seed pods and "cotton" so undesirable in the Cottonwood. Will grow anywhere. ABC.

POPLAR, SILVER LOMBARDY (*Populus Bolleana*)—Grows upright, much like Lombardy, with broader leaves, glossy green above and silvery gray beneath. Handsomer than Lombardy and much hardier. We recommend Bolleana altogether where the tall spiral effect is desired. ABC.

POPLAR, SILVER (*Populus alba*)—In habit of growth much like Carolina, with leaves the color of Bolleana—glossy green above, silvery beneath. Not recommended for lawn planting as it sprouts from the roots. ABC.

SYCAMORE, AMERICAN (*Platanus occidentalis*)—A lofty, wide-spreading tree; large heart-shaped leaves; smooth, green-gray bark. AB.

TULIP TREE (*Liriodendron tulipifera*)—A native of the magnolia order, remarkable for its symmetry, its rich glossy foliage, large tulip-like flowers. Not hardy north. A.

***WALNUT, BLACK** (*Juglans nigra*)—One of the most valuable timber trees for high grade commercial lumber. The past few years have made terrible inroads on the supply of Black Walnut and those who have a small area of waste or bottom land will do well to plant a Walnut grove. Moderate grower. Handsome tree; perfectly hardy and not subject to borers. ABC.

WALNUT, JAPANESE (*Juglans Sieboldiana*)—Much harder than English Walnut; highest quality of all hardy nuts for this region. We have a large specimen Japan Walnut on our home grounds and seldom miss a crop. Rather thick shell. AB.

WILLOW, LAUREL (*Salix pentandra*)—Its deep green, shiny leaves, place this dwarf variety foremost among the upright growing willows. ABC.

***WILLOW, RUSSIAN GOLDEN** (*Salix vitellina aurea*)—A large quick growing willow with yellow bark; recommended only for quick deciduous windbreak planting in the extreme north. BC.

WILLOW, THURLOW WEeping (*Salix elegantissima*)—As the botanical name indicates, this is an elegant tree of its class. Hardier and more beautiful than the once famous Babylonian Willow—the most graceful and desirable of all ornamental willows. ABC.

WILLOW, WISCONSIN WEeping (*Salix Cordata pendula*)—Of drooping habit and perfectly hardy throughout the northwest. BC.

NOTE—One and two year seedlings or cuttings can be furnished in varieties marked (*), quoted separate from shade trees in price list under Forest Tree Seedlings.

Roses



Preparing a special rose garden. Note trenches for beds, two feet deep.

in heavy soils. The soil should be well drained; the plants cultivated each week from April till July 1st, then heavily mulched with straw or lawn clippings; they should be sprayed with lime-sulphur or Bordeaux for fungus and with lead-arsenate for slugs and caterpillars. All hybrid perpetual and hybrid tea roses require winter protection. The best and most practical way to protect your roses is to mound the earth twelve inches high about the plants just before the ground freezes in fall. Then after the ground freezes, cover the bed with evergreen boughs, old branches, corn stalks or any roughness, to shade the bed and catch the winter snows. When this is done even the highly prized hybrid teas will winter safely; but this work must be kept up every year.

Climbing and Rambler Roses

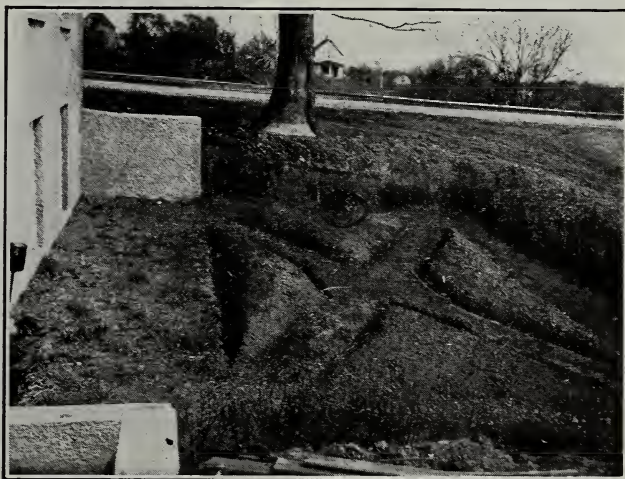
BALTIMORE BELLE—Pale blush, nearly white; double; strong grower; fairly hardy. ABC.

BLUE RAMBLER (Veilchenblau)—Very much like Crimson Rambler except color of flower, which is violet rose (not blue as the name indicates). AB.

CLIMBING AMERICAN BEAUTY—One of the few everblooming climbers for this region. Fairly strong grower with fine, large American Beauty roses during the growing season. Should have winter protection everywhere, especially north. AB.

CRIMSON RAMBLER—Most popular of all climbing roses. Strong, rapid growth, handsome foliage; a marvelous abundance of brightest crimson flowers in June; semi-double; remain on the vine a long time without losing color. ABC.

DOROTHY PERKINS—A beautiful shell pink; flowers more open and distinct than Crimson Rambler; foliage finer, smoother and darker green. On account of its Wichuriana parentage, it makes an excellent trailing rose to cover banks and barren ground. ABC.



Rose garden just planted. Trench filled with five inches rock and gravel, three inches yellow clay, and sixteen inches rich soil and leaf mold.

PRAIRIE QUEEN—Bright, rosy red, frequently striped with white. Large compact; very free bloomer. Hardier than the Ramblers. Fine for exposed porch corners. ABC.

Roses—Continued

EXCELSA (Red Dorothy)—A radiant, blood red Dorothy. Very large flower clusters. ABC.

FLOWER OF FAIRFIELD (Everblooming Crimson Rambler)—Carries the crimson splendor of the type from spring throughout the entire growing season and for this reason more appreciated than the Crimson Rambler, which it closely resembles in all other respects. ABC.

PINK RAMBLER—Not hardy. Dorothy Perkins is better.

SEVEN SISTERS—Crimson, fading to blush; flowers large. The hardiest of the old-fashioned climbers. ABC.

TAUSENDSCHOEN (Thousand Beauties)—The most attractive Rambler rose. Very frequently we find light red, pink and white flowers, all in the same cluster, at the same time. AB.

WHITE DOROTHY—As hardy, vigorous and free blooming as its pink rival. Valuable because of the rarity of good white climbing roses. AB.

WHITE RAMBLER—Like Crimson Rambler except color, it being pure white, not as hardy. White Dorothy is better. A.

WICHURIANA—Memorial or Trailing Rose. Commands our respect for producing the Dorothy trio, which have now largely supplemented the demand or use for Wichuriana in this region. A.

YELLOW RAMBLER—Like Crimson Rambler except color of bloom, which is handsome yellow. Not hardy north. A.

Moss, Austrian and Brier Roses

CRESTED MOSS—Deep pink buds, surrounded by mossy fringe and crest. Very beautiful and fragrant. In our zeal for everblooming roses, we have overlooked the fine old moss type, still unexcelled in hardiness, fragrance and beauty. ABC.

RED MOSS—Fine, rosy red. Large, full and globular; fragrant and mossy. ABC.

WHITE MOSS—Flowers pure white, large and full; buds very beautiful; a very rapid grower. ABC.

SALET MOSS—Light rose, large and full; a good autumn bloomer. ABC.

HARRISON YELLOW—Golden yellow; double; very early blooming; hardy. ABC.

PERSIAN YELLOW—Deep, bright yellow; double; very early. ABC.

SWEET BRIER—One of the most fragrant of all roses. Especially fine when planted in clumps with other shrubbery; in borders or in hedges. Assorted colors can be furnished from the list of Penzance's Hybrids. ABC.

Hybrid Perpetual Roses

The following "June Roses" so admirably suited to garden culture, will bloom again in the fall if the wood is severely pruned back in March and the flowers removed as soon as in full bloom. Hardier than hybrid teas though they do not cover so extended blooming period.

ALFRED COLOMB—Bright cherry red, one of the good dark red sorts. A.

ANNE DE DIESBACH—Brilliant rose color, very large broad flowers. A.

BARON DE BONSTETTIN—Rich dark red; highly fragrant; very double. One of the best very dark red roses. AB.

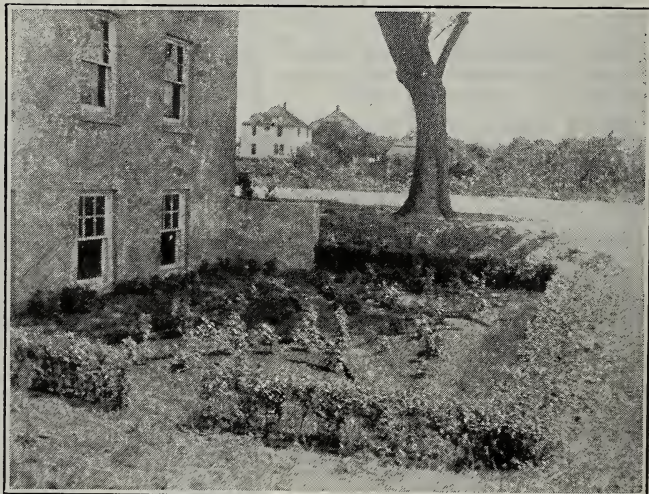
COQUETTE DES ALPS—Small but highly fragrant; white, slightly shaded with pink; very profuse. More valued in the landscape than for cut flowers. AB.

EARL OF DUFFERIN—A fine dark rose with large, red, finely formed flowers. AB.

F. K. DRUSCHKI (Snow Queen)—By all odds the best hardy white rose. Very strong grower; profuse bloomer; large, waxy, pure white flowers, highly fragrant, prettier than the picture. Covers an unusually long blooming period. ABC.

GENERAL JACQUEMINOT—An old favorite among the bright red roses. Medium size, free bloomer, hardy and reliable. ABC.

HUGH DICKSON—One of the new crimson roses that we have recently added to our list on account of its large, perfectly shaped flowers; strong, vigorous and productive growth. AB.



Rose garden four weeks after planting. Roses commencing to bloom.

MADAM CHARLES WOOD—An old favorite red rose; extra large; full and double; deep crimson. AB.

MAGNA CHARTA—Valued on account of its color; brilliant, bright pink; very large and fragrant; a free bloomer. AB.

MADAM PLANTIER—Not an H. P. rose though generally listed with them. Blooms only once during the season. A hybrid China; extremely hardy; fine for cemetery and landscape. Large clusters of medium sized flowers in June. ABC.

MARGARET DICKSON—Before Druschki became known, this was our best white hybrid rose. Pure waxy white; extremely hardy; strong grower. Very large flowers. ABC.

MARSHALL P. WILDER—Bright cherry red covering an unusually long blooming period. Vigorous and hardy. Flowers globular and shapely. ABC.

MRS. JOHN LAING—In making up your rose bed, don't overlook Laing for it supplies a handsome light pink that is difficult to find elsewhere in hardy roses. Fragrant and free bloomer. ABC.

PAUL NEYRON—Largest of all, though a little coarse when in full bloom. A bright, ruddy pink; very double; fragrant and free blooming. Cut Paul Neyron when the buds open. Then it is most attractive and also most productive. ABC.

PRINCE CAMILLE DE ROHAN—Sometimes called "Black Prince." Darkest red; almost purple. Flowers large; of excellent form and size. Probably the best hardy dark red H. P. rose. ABC.



Frau Karl Druschki

ULRICH BRUNER—Cherry red, extra large, full globular flowers; fragrant and free blooming. Much like its parent, Paul Neyron, except color. ABC.

Hybrid Tea Roses

A little extra care by way of cultivation, feeding and mulch in summer; an extra blanket of leaves and litter in late fall; then you have in this class truly everblooming roses of the greenhouse standard of excellence. The following varieties have been adopted from a long list because of their ability to withstand our hot, dry summers without serious leaf injury.



Paul Neyron

AMERICAN BEAUTY—The great greenhouse rose. When grown in the garden the bloom is not quite so large but fully as fragrant and handsome. Deep pink, shaded with carmine. A.

GENERAL McARTHUR—Dazzling crimson scarlet; unusual fragrance. One of the truly fine red roses for cutting and bedding. A.

GRUSS AN TEPLITZ—A rather small, rich velvety, crimson-red rose; the freest blooming of all roses except the Baby Rambler group. Almost constantly in bloom from May till frost and one of the hardiest of the H. T. type. Every rose lover should have it. ABC.

K. A. VICTORIA—The most handsome buds in the rose class. Elegant, large, pointed buds and very large, waxy, creamy-white flowers of delicious fragrance. By far the best white H. T. for this region. AB.

KILLARNEY—Queen of the Irish roses. Bright, carmine pink, marbled with creamy white; long buds and enduring bloom. Can also be furnished in Pure White. A.

Rosés—Continued



Soleil D'Or

LaFRANCE—Delicate, silvery rose, changing to pink; very large, full, round and fragrant. A constant bloomer, unsurpassed for delicacy of color. Least hardy of all H. T. roses in the list. A.

MADAM CAROLINE TESTOUT—Light, salmon-pink, edged with silvery rose. The most beautiful and desirable pink H. T. Seldom out of bloom. AB.

RAYON D' OR—Like LaFrance, for delicacy of bloom it ranks first but also like LaFrance it is generally a little too tender for ordinary garden culture. Copper-yellow; handsome; long, pointed bud; beautiful free yellow rose. A.

SOLEIL D' OR—An Austrian Tea hybrid of highest rank. Very vigorous and hardy; free blooming; with handsome yellow flowers, splashed with red. By far the best yellow ever-blooming rose for the garden. Cut back the wood severely every year in March to get a profusion of bloom. ABC.

Baby Rambler Roses

With ordinary care, Baby Ramblers will bloom continually from May till frost; then, when the leaves have fallen, they may be potted, left in cellar a month for resting; then brought into the house where they will bloom all winter. Hardier than hybrid roses and better for northern rose lovers.

PINK (Madam Cutbush)—Clear, flesh pink with shadings of rose. Individual flowers small, semi-double; in large clusters. ABC.

RED (Erna Terchendorf)—The most vivid crimson of the many red babies with the most distinct and attractive flowers. Larger and more fully double than the type. ABC.

WHITE (Catherine Zeimet)—Pure white flowers, with the unceasing freedom of bloom of the reds and pinks of this class. ABC.

Rugosa and Bush Roses

This class is used entirely for clump planting with shrubbery, for borders and hedges. Should not be planted in the rose garden with the hybrids.

RUGOSA RED—Single flowers; rosy-crimson; very fragrant; continuous bloom from June till September. Very dark green, attractive foliage; red berries in fall and winter; finest when interplanted with white rugosa in the ornamental hedge or border. Perfectly hardy, free from insects and diseases. ABC.

RUGOSA WHITE—Not quite as vigorous as rubra though fully as hardy; single flowers; pure white. In all other respects identical with rugosa red. ABC.

BLANDA—Wild prairie bush rose with single, very fragrant flowers in June. Attractive crimson, nearly thornless stem during fall and winter. Desirable for mass planting, especially on a rough hillside. Absolutely hardy. ABC.

SETIGERA—Useful only for bramble planting, on hillsides, in wild borders or along wild-wood drives; sometimes used mixed with other shrubs. Large, fragrant, rosy-pink, single flowers in June. ABC.



Baby Rambler

Tree or Standard Roses

Grafted in the tops of hardy rose stems; recommended only as a novelty. On account of the extreme difficulty of winter protection, we suggest customers plant tree roses in tubs, which may be sunken in the garden soil during summer, taken up and cellared over winter, after the leaves have ripened in the fall. Tree roses can be furnished in colors, red, pink and white.

Ornamental Shrubs



Thousands of one, two and three year ornamental shrubs.

PLANT shrubs around house foundations, in the lawn corners, at the drive or walk entrances and in the borders. While all shrubs listed bloom at some period during the growing season, always keep in mind that you are planting shrubs largely for foliage effect—to “trim up” the lawn and to connect the house with the surroundings. If you want an abundance of flowers in colors, purple, blue, red, yellow, pink and white, all shades, and in abundance from spring till fall; then spade a little border around your shrubbery planting and fill it with perennials. For the convenience of customers all shrubs are arranged according to their common names.

ALMOND, PINK (*Prunus Japonica*)—Flowers like small, double roses. Very profuse and very early; often in full bloom ahead of foliage. Upright, tall grower, hardy and desirable. 5 ft. ABC.

ALMOND, WHITE (*Prunus Japonica alba*)—Like above except flowers are pure white. 5 ft. ABC.

ALTHEA, ROSE OF SHARON (*Hibiscus syriacus*)—Very desirable autumn flowers when few others are in bloom. Tall upright grower, almost tree form when fully matured, but not hardy north of Zone A. Can be supplied in purple, red, pink and white. 8 ft. A.

ARROW-WOOD (*Viburnum dentatum*)—Bright green, heart-shaped leaves, turning purple and red in fall. Small, flat cymes of flowers in May and June with blue-black berries in fall and winter. Upright branches. Entirely hardy. 6 ft. ABC.

BARBERRY, DWARF OR JAPANESE—(*Berberis Thunbergi*)—The best hedge in America. Dwarfish and spreading; delicate and handsome. Blooms in May, are white; berries scarlet and in profusion. Autumn foliage brilliant. By far the best barberry even before the common green and purple leaved barberries were discarded. One of the best shrubs for shady places and for underplanting. 4 ft. ABC.

BARBERRY, EVERGREEN [*Berberis (Mahonia) aquifolia*—One of the very few broad-leaved evergreen shrubs adaptable to this region. Bright, shining, rich green, holly-like foliage, turning red and purple in early winter and remaining on the plants till spring. Attractive yellow clusters of bloom in May or June. Planted in partial shade, in soil made up of leaf mold and sand, it is especially valuable for foundation planting, for late fall and winter attractiveness. Write for prices. 3 ft. ABC.

BUCKTHORN (*Rhamus catharticus*)—A dense, irregular, twiggy bush with dark green leaves and small white flowers in May or June. Only recommended for hedge and border planting in the extreme north. 8 ft. BC.

BUTTERFLY BUSH (*Buddleia*)—A quick, bushy growth, generally dying back to the crown in fall; producing attractive blue spikes of flowers from July till frost. 4 ft. AB.

BUTTONBUSH (*Cephalanthus occidentalis*)—A native shrub, recommended for very wet places, where most other shrubs fail. 5 ft. ABC.

CALYCANTHUS (*Calycanthus floridus*)—Wood, foliage and flowers very fragrant; flowers dark purple, on short stems throughout the summer. Needs winter protection north. 5 ft. AB.

Ornamental Shrubs—Continued

CHOKEBERRY RED (*Aronia arbutifolia*)—Tall, upright grower; leaves smooth, pale green with good fall coloring; flowers in small racemes during May succeeded by red berries hanging on well into winter. 10 ft. ABC.



Barberry

CHOKEBERRY BLACK (*Aronia melanocarpa*)—More dwarfish habit than red Chokeberry, with jet-black berries. 10 ft. ABC.

CORALBERRY OR INDIAN CURRANT (*Symphoricarpos vulgaris*)—Useful for "filling in" shrubby clumps, underplanting and especially good in shady places. Inconspicuous flowers, followed by small red clusters of berries in thick ropes along the stem. Sometimes called red Snowberry and in the timbered country, better known as "Buckbrush." 3 ft. ABC.

DEUTZIA, PRIDE OF ROCHESTER (*Deutzia scabra crenata*)—Tall, upright growing shrub of the Mock Orange habit; large, double white flowers slightly tinged with red. Not hardy north. 6 ft. AB.

DWARF DEUTZIA (*Deutzia gracilis*)—Low and spreading, densely bushy; its slender branches wreathed with white and pink flowers during May. A little winter protection is appreciated. 2 ft. AB.

LEMOINE'S DEUTZIA (*Deutzia Lemoinei*)—Large flowers of pure white, borne on cone-shaped heads; not so tall growing as Pride of Rochester. 4 ft. AB.

SILKY DOGWOOD (*Cornus amomum*)—Dwarfish growth, silky leaves; greening white flowers; attractive black berries. 5 ft. ABC.

DOGWOOD, RED BRANCHED (*Cornus alba siberica*)—Large, spreading shrub with small white flowers in May, succeeded by ornamental berries in fall. Mostly valued for its bright red stems during fall and winter. 5 ft. ABC.

DOGWOOD, VARIGATED-LEAVED (*Cornus elegantissima*)—Branches fully as bright and attractive as the above; foliage light green with handsome silver margin. Hardy but difficult to propagate. Write for prices. 3 ft. ABC.

DOGWOOD, ALTERNATE-LEAVED (*Cornus alternifolia*)—In our judgment, the most graceful and desired dogwood. Leaves rounding, deep green and alternate. Branches nearly at right angles; bark dark purple. 6 ft. ABC.

RED OSIER (*Cornus stolonifera*)—Medium size and spreading; white flowers; white berries; dark red bark. Especially good in low wet places. 6 ft. ABC.

YELLOW OSIER (*Cornus stolonifera lutea*)—A striking yellow branched form of Red Osier; very satisfactory for contrast. 5 ft. ABC.

ELDER (*Sambucus*)—Chiefly planted for foliage effect; all tall and rough growing; very attractive when properly placed; should always be used in background planting.

ELDERBERRY (*S. canadensis*)—The wild elderberry of our woods and roadsides. Large flat cymes of most fragrant flowers succeeded by clusters of black fruit; highly prized for wine and canning; very attractive to native birds. 12 ft. ABC.

RED-BERRIED ELDER (*S. racemosa*)—Similar to our common Elderberry except berries are red and the stem and leaves pubescent. 8 ft. ABC.

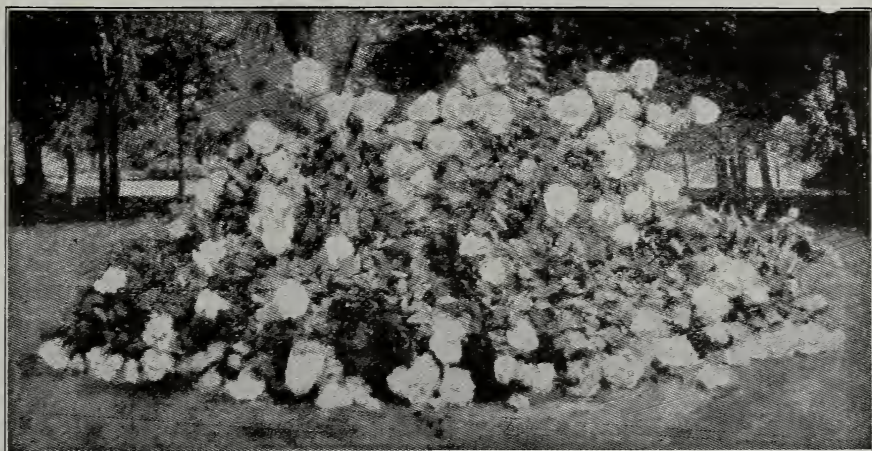
CUT-LEAVED ELDER (*S. acutiloba*)—Remarkably fine cut foliage. Large cymes of delicate, fragrant, white flowers in June and July followed by large fruit clusters. 8 ft. ABC.

GOLDEN ELDER (*S. nigra aurea*)—One of the best yellow-leaved shrubs. Especially fine in a background clump planted with purple-leaved plum for contrast and continual fall effect. Fragrant flowers; black berries. Does well in partial shade. 6 ft. ABC.



Seedling evergreen shade beds with *Spirea V. H.* in the foreground.

FALSE INDIGO (*Amorpha fruticosa*)—Large, spreading bush, with bright green, pinnate leaves; deep violet-blue flowers in June. 4 ft. ABC.



Hydrangea

FLOWERING CURRANT (*Ribes aureum*)—A native species of easy culture, with shining leaves and yellow flowers. Not attractive except in heavy mass planting. 5 ft. ABC.

GOLDEN BELL (*Forsythia*)—These splendid shrubs have proven especially valuable during the past three years of unusually severe winters. The spreading or drooping varieties are indispensable for foundation planting and for underplanting in front of the taller shrubs of the clump or border. Their bright golden flowers, appearing before the leaves, are the first to light up the garden with masses of yellow. The following four varieties differ slightly except in habit of growth:

Intermedia—Earliest blooming. 5 ft. AB.

Viridissima—Most upright and deepest yellow. 6 ft. AB.

Suspensa—Long curving branches. 4 ft. AB.

Fortunei—In our judgment the finest; a little more upright than *Suspensa*. 5 ft. AB.

GLOBE FLOWER (*Kerria Japonica*)—Graceful, slender, drooping branches, with a heavy bloom of single and double, dark yellow flowers in June, continued to one extent all summer. Treat as perennial north. 4 ft. AB.

HIGHBUSH CRANBERRY [*Viburnum opulus* (*oxycoccos*)]—Handsome, bright foliage like Snowball; flat cymes of single white flowers in June, followed by the most attractive of all winter berries—brilliant red fruit in showy masses, all winter. 7 ft. ABC.

HONEYSUCKLE (*Lonicera*)—Among the first shrubs to attain full leafage in the spring; with bright fragrant flowers followed by showy flowers, the bush honeysuckles form an interesting group.

FRAGRANT HONEYSUCKLE (*L. fragrantissima*)—Dwarf, spreading growth, bright red flowers, unusually fragrant. 5 ft. ABC.

JAPANESE HONEYSUCKLE (*L. Morrowii*)—The best bush honeysuckle for foundation planting and for small clumps; spreading angular growth; yellow flowers, red fruit. 8 ft. ABC.

PINK TARTARIAN HONEYSUCKLE (*L. tartarica grandiflora*)—Most vigorous of the tartarian group; tall, upright; handsome heart-shaped foliage; fine for borders, hedges and large clumps. Pink flowers. 10 ft. ABC.

RED TARTARIAN HONEYSUCKLE (*L. tartarica rubra*)—Deep rose-colored flowers—very early. 8 ft. ABC.



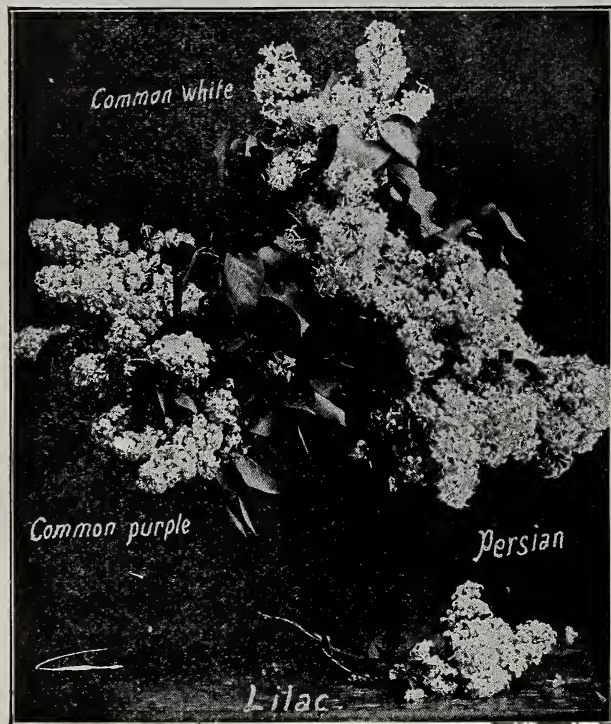
Pink Tartarian Honeysuckle

WHITE TARTARIAN HONEYSUCKLE (*L. tartarica alba*)—Flowers blush-white. 8 ft. ABC.

HYDRANGEA, EVERBLOOMING (*Hydrangea arborescens sterilis*)—"Hills of Snow." Flowers from June till September in partial shade; greenish white in large balls of bloom of the Snowball type. Leaves broad, very dark green. 4 ft. ABC.

Ornamental Shrubs—Continued

HYDRANGEA, FALL BLOOMING (*H. paniculata grandiflora*)—Great masses of white flowers in fall, when other bloom is scarce, assure them a place in every yard. One of the most valuable flowering shrubs on account of its great flower panicles a foot long, and its season of bloom—August till frost. Flowers first snowy white, then pink, then reddish bronze and green. Give them rich soil, partial shade and prune severely every spring and you will have great, compact masses of bloom. 5 ft. ABC.



JAPAN QUINCE (*Cydonia Japonica*)—Very early in spring this fine old shrub is entirely covered with dazzling orange-red flowers. Growth bushy and spreading. A fine foundation shrub for south and east front. Often used for hedging. 4 ft. AB.

JERSEY TEA (*Ceanothus Americanus*)—Low, erect shrub with small ovate leaves and a profusion of short-lived white flowers from July till September. Good in partial shade. 3 ft. AB.

KERRIA WHITE (*Rhodotyphus kerrioides*)—An attractive, spreading shrub with light green, raspberry-like foliage and large single white flowers from May till the end of the growing season. A neat, quiet beauty. 6 ft. ABC.

LILAC, PURPLE (*Syringa vulgaris*)—Best beloved of all the old-time garden shrubs. Beautiful, fragrant flowers, rich green foliage, absolute hardiness and adaptability; merits more extensive planting. Fine for clumps, hedges, screens or border. 10 ft. ABC.

LILAC, WHITE (*Syringa vulgaris alba*)—Leaves lighter green than type; flowers pure white. 10 ft. ABC.

PERSIAN LILAC (*Syringa Persica*)—Not quite as tall growing as the common lilac; leaves narrower; branches more slender and less upright; flowers smaller. Blooms younger than common lilac, generally the first season after transplanting. 8 ft. ABC.

PERSIAN WHITE (*Syringa Persica alba*)—Like Persian type except flowers nearly pure white. 8 ft. ABC.

Rouen Lilac (*Syringa chinensis*)—Taller growing than Persian; flowers reddish-purple; leaves narrow. 8 ft. ABC.

Charles X (Sy. vul. var. Chas. X)—Strong grower with large trusses of rather loose, single, reddish-purple flowers. 5 ft. ABC.

Frau Dammann—Immense trusses, pure white, single flowers of medium size. 5 ft. ABC.

Ludwig Spaeth—Long panicle, large single, individual flowers, dark purplish-red. One of the finest. 5 ft. ABC.

Marie LeGray—Best single white. 5 ft. ABC.

President Grevy—The only double lilac that blooms freely with us. Beautiful blue, large flowers on magnificent panicles. 5 ft. ABC.

MOSS LOCUST OR ROSE ACACIA (*Robinia hispida*)—Spreading, mossy, irregular growth. Beautiful clusters of rose colored flowers in July covering a large bloom period. 7 ft. ABC.

NINEBARK (*Physocarpus opulifolia*)—Strong upright grower; heavy umbels of rough white flowers in June which turn dark red towards maturity. 8 ft. ABC.

NINEBARK, GOLDEN (*P. opulifolia lutea*)—Similar to above except of slower, lower growth and greenish yellow foliage. 6 ft. ABC.

PEARL BUSH—*Exchorda grandiflora*)—A fine shrub, producing large white flowers in May. 7 ft. ABC.

PRIVET AMOOR RIVER NORTH (*Ligustrum amurense*)—The hardest Russian Privet. Light green leaves, upright growth; the only privet for hedge planting in northern latitudes. We find it much superior to Polish Privet which, with us, is much subject to blight or summer injury. 8 ft. ABC.

PRIVET, CALIFORNIA (*L. Ovalifolium*)—Except in the extreme southern limits of our territory, the California Privet should not be planted because of lack of hardiness. With us it kills back to the ground almost every winter, and is practically worthless for hedge purposes. 10 ft. Southern A.

REGEL'S PRIVET (*L. Regelianum*)—A type of Ibota Privet, reverting back to the type when grown from seed. Being difficult to propagate from cuttings, this variety is rather expensive for hedge planting but do not forget that it is one of the most graceful and valuable shrubs for foundation planting and especially along the edge of the border. Beautiful, horizontally spreading branches. 4 ft. AB.

PLUM, DOUBLE FLOWERING (*Prunus triloba*)—Flowers double, delicate pink, large, thickly set on long, slender branches. Blooms in May. 7 ft. ABC.

PLUM, PURPLE LEAVED (*Prunus cistena*)—A new cross between Dakota Sand Cherry and the purple-leaved plum of Persia, originated by Prof. Hansen. Of more dwarf habit of growth than pissardi and very much hardier. Rich, glossy red foliage all summer. Use this to fill the places occupied by the purple-leaved barberry in your shrubby clumps. 4 ft. ABC.



A block of our good, old-fashioned Snowball in bloom.

PLUM, PURPLE-LEAVED (*Prunus pissardi*)—Small tree or shrub; leaves lustrous crimson, changing to dark purple. Not hardy north. 6 ft. A.

SIBERIAN PEA (*Caragana arborescens*)—Small tree or shrub; light green, pinnate leaves; pea-shaped yellow flowers in May. Often used for hedging in the north. 12 ft. ABC.

SILVERTHORN (*Eleagnus longipes*)—A pretty shrub, with light green silvery foliage and large, bright red, edible berries from July till winter. 5 ft. A.

SNOWBALL (*Viburnum*)—Including the following:

Guelder Rose (*V. opulus sterilis*)—The old fashioned Snowball. Globular clusters of greenish white, sterile flowers during the later part of May; generally on hand to help out on Decoration Day. 10 ft. ABC.

Single Japan Snowball (*V. tomentosum*)—Flowers pure white; large flat cymes, in great profusion in early June. Handsome foliage and valuable because of its graceful spreading growth. 6 ft. ABC.

Japan Snowball (*V. plicatum*)—Handsome plicated leaves; globular heads of pure white, semi-double flowers in June. More attractive than the common snowball but less hardy. The foliage cannot withstand our hot dry weather during July and August. Besides that, it often winterkills. 6 ft.

SNOWBERRY (*Symphoricarpus racemosa*)—In habit of growth much like Spirea Van Houttei. Small pink flowers in June and July followed by large, white, waxy berries which hang on the bush all winter in great, attractive clusters. Does well in shade or half shade. 5 ft. ABC.

SPIREA ARGUTA—Dwarf, drooping habit; finer foliage than Van Houttei; very early, white flowers. Fine for clumps and sunny foundation planting. 3 ft. ABC.

SPIREA ANTHONY WATERER—Very dwarf and upright, seldom growing higher than thirty inches; dark crimson flowers all summer. One of the few continuous blooming shrubs and very desirable for low edging and bedding. 2 ft. ABC.

SPIREA BILLARDI—Rather upright, narrow leaves, rose colored bloom during the greater part of the summer. 5 ft. ABC.

SPIREA COLLOSA ALBA—Much like Anthony Waterer except flowers are pure white. 2 ft. ABC.

SPIREA PRUNIFOLIA—Double flowering, plum-leaved Spirea and one of the most attractive. Pure white, double flowers covering a long bloom period. Rather tall growing; therefore plant in the background of your spirea group. 6 ft. ABC.

SPIREA THUNBERGII—The fine, light green, feathery foliage of this variety makes it quite distinct and especially attractive when planted with other spireas. Dwarf habit, rounded graceful form; slender, drooping branches; very early though small white flowers; a mighty fine shrub. 4 ft. ABC.

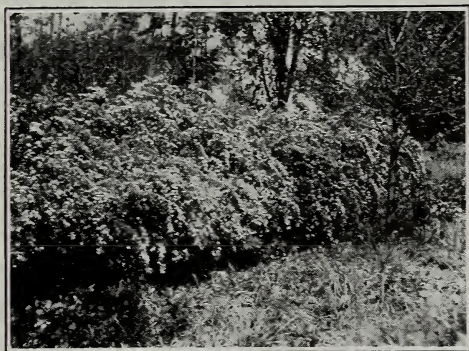
SPIREA VAN HOUTTEI—Most popular spirea for general, all-around yard planting. Flowers in May and June cover the gracefully drooping branches. At this time it is by far the most attractive shrub in the yard or garden. Its fine foliage and graceful habit place it first for foundation planting, flowering hedges, clumps and single planting. Adaptable to any soil or location except extreme shade. 6 ft. ABC.

SUMAC, FRAGRANT (*Rhus aromatica*)—Broad leaves. In this respect differing from all other sumacs. Leaves highly fragrant; flowers greenish white. Fine for interplanting with other sumacs where more foliage body in the clump is desired. 3 ft. ABC.

SUMAC, SMOOTH (*Rhus glabra*)—This is the native sumac so abundant along our roadsides; fine on account of its rich fall coloring. 5 ft. ABC.

SUMAC, CUT-LEAVED (*Rhus glabra laciniata*)—A very striking sport of the smooth sumac; moderate growth; very deep, sharply cut leaves, dark green above and glaucous below; turning rich red in fall. 2½ ft. ABC.

SUMAC, STAGHORN (*Rhus typhina*)—Very large shrub or small tree with brilliant foliage and red fruit in fall. 15 ft. ABC.



A row of seven year old Spirea V. H. Nothing more graceful or attractive.

SUMAC, FERN-LEAVED (*Rhus typhina laciniata*)—A very beautiful shrub, lower growing than staghorn, with handsome, deeply cut, fern-like leaves of brilliant fall coloring. 9 ft. ABC.

SYRINGA, MOCK ORANGE (*Philadelphus coronarius*)—Tall, upright, hardy shrub with pure white, highly fragrant, orange-like flowers in May and June. 6 ft. ABC.

Ornamental Shrubs—Continued



Weigelia

GOLDEN-LEAVED SYRINGA (*Philadelphus c. folius aureis*)—The finest dwarf, yellow-leaved shrub. Perfectly hardy, fine for foundation planting where medium height shrubs of yellow foliage are desired. Good for shady places too. 3 ft. ABC.

TAMARIX, RUSSIAN (*Tamarix Odessana*)—Finely feathered foliage of silvery-green; large loose panicles of lavender-pink flowers in July and August. The only Tamarix hardy in this latitude. 8 ft. ABC.

WAYFARING TREE (*Viburnum lantana*)—Largely prized on account of its heavy, green, plicated foliage which remains on the bush very late in fall. White flowers in May followed by red berries. 7 ft. ABC.

WEIGELIA, EVA RATHKE—Flowers brilliant crimson, covering an unusually long blooming period. June and July. 4 ft. AB.

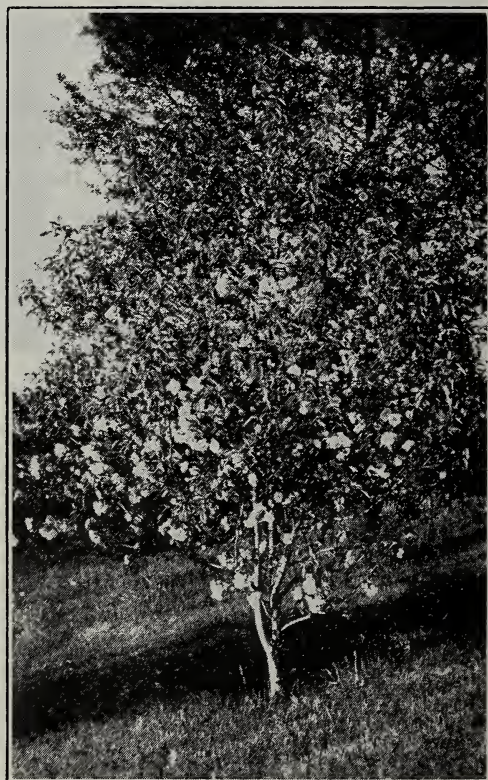
WEIGELIA, ROSEA—Larger growing than Eva Rathke; fine rose colored flowers in June. 6 ft. AB.

WITCH-HAZEL (*Hamamelis virginiana*)—A tall shrub with broad, handsome leaves; yellow flowers during late fall. 10 ft. ABC.

Dwarf Flowering Trees

This group represents a very valuable addition to our shrub list. Many of them are planted largely as specimens though their real home is in the background of the border and in the shrubby clumps.

BECHTEL'S DOUBLE FLOWERING CRAB—(*Pyrus ioensis*)—The most beautiful and desirable of all dwarf flowering trees. Medium growth. Covering in early spring with large, beautiful, double, pink, fragrant flowers. From a distance the flowers have the appearance of small roses. Blooms young, our three year trees always blooming in nursery. 10 ft. ABC.



Specimen tree of Bechtel's Flowering Crab on our home grounds. From this little mother tree, thousand of buds have been taken for nursery propagation.

RED BUD OR JUDAS TREE (*Cercis canadensis*)—Its heart-shaped leaves of pure green, glossy above and grayish green beneath merit its place in the garden or yard, while the profusion of delicate, reddish-purple flowers, covering the tree before the leaves appear in the spring, place it in the foremost rank of early spring attractiveness. 12 ft. AB.

SMOKE TREE OR PURPLE FRINGE (*Rhus cotinus*)—Much admired for its curious, hair-like flowers of light purple color which entirely cover the tree in early summer. Grows rather large and spreading, so give it plenty of room. 15 ft. ABC.

STRAWBERRY TREE, AMERICAN (*Euonymus atropurpurea*)—Called Wahoo or Burning Bush. Tall growing native, often found in our woods. Handsome leaves, bright green bark; leaves turning scarlet in fall. Berries large, bright red and most attractive. 15 ft. ABC.

STRAWBERRY TREE, EUROPEAN (*Euonymus Europea*)—Foliage and bark similar to Wahoo. Berries white and rose colored. Not hardy north. 12 ft. AB.

THORN, SCARLET (*Crataegus coccinea*)—The finest native. Single flowers and scarlet fruit. Grows spreading and shapely. Can be trimmed to any desirable form. 20 ft. ABC.

THORN, PAUL'S DOUBLE SCARLET (*Crataegus oxycantha flora plena*)—Flowers double; bright, carmine red. 15 ft. ABC.

THORN, DOUBLE WHITE (*Crataegus oxycantha flora alba plena*)—Flowers double white. 15 ft. ABC.

TREE HYDRANGEA—Our fine, large paniced, fall blooming hydrangea trained in tree form on stems four feet high. Very attractive. ABC.

TREE LILACS—We always have a number of Lilacs in variety trained in tree form on stems 3 to 5 ft. high. ABC.

Vines and Climbing Shrubs

BIGNONIA OR TRUMPET FLOWER (*Tecoma radicans*)—A fine, hardy, climbing shrub with large, trumpet-shaped, scarlet flowers in August. Can be trained in bush form. Sprouts from the roots. ABC.

BITTERSWEET, AMERICAN (*Celastrus scandens*)—A native climbing shrub with fine large leaves, yellow flowers and capsuled orange colored fruit in fall. ABC.

CLEMATIS, LARGE FLOWERING—Rather hard to establish on account of the cutworm. If wood ashes are placed three to four inches deep around the plant when set out, or, if an ordinary tin can, with top and bottom removed, is pushed into the ground around the roots, the cutworm will not bother your clematis and you may have the most attractive of all climbing vines on your porch. We can supply these in three best colors—red, white and blue—in the following varieties:

Jackmanii—Blue and hardiest of all. ABC.

Henryi—White. ABC.

Madam E. Andre—Red. ABC.

CLEMATIS, PANICULATA—Called White Star Clematis. A stronger grower and more prolific bloomer than the large flowering sorts. Flowers small, star-shaped, pure white; very fragrant; cover an exceptionally long blooming period during July and August. ABC.

CLEMATIS VIRGINIANA—Called Virgin's Bower. A perfectly hardy, rapid growing vine of clean foliage and a great profusion of very small, white flowers during the summer. Fine to cover fences, old trees, unsightly building and arbors. ABC.

DUTCHMAN'S PIPE (*Aristolochia macrophylla*)—A rapid climber with very large, light green leaves and curious, pipe-shaped yellow-brown flowers. Not hardy north. A.

HONEYSUCKLE, HALL'S JAPAN (*Lonicera Halleana*)—Pure white flowers changing to yellow. Fine for shady places. Blooms continuously from July till frost. ABC.

HONEYSUCKLE, MONTHLY FRAGRANT (*Lonicera Belgica*)—Red and yellow flowers from July till frost. Very fragrant. Best in partial shade. ABC.

HONEYSUCKLE, SCARLET TRUMPET (*Lonicera sempervirens*)—Most attractive flowers, bright scarlet, inodorous; most vigorous of the climbing honeysuckles. Flowers from July till frost. Sun or shade though partial shade is best. ABC.

IVY, AMERICAN, OR VIRGINIA CREEPER (*Parthenocissus quinquefolia*)—Very rapid growing, fair fall coloring; requires trellis for support. This is our common woodbine. ABC.



Boston Ivy on our north office wall. Rhododendron in the foreground. The Ivy is all right but Rhododendron require too much constant care and protection.

IVY, ENGELMAN'S—(*Parthenocissus quin. Engelmannii*)—A decided improvement over Virginia creeper, both in fall coloring and its ability to cling to rough walls, etc., without support. ABC.

IVY, BOSTON (*Parthenocissus tricuspidata Vetchii*)—Will cling to any wall or surface, even to window glass; three leaved foliage overlapping, changing to crimson-scarlet in fall. Should be covered the first winter. Not hardy on south or west walls. AB.

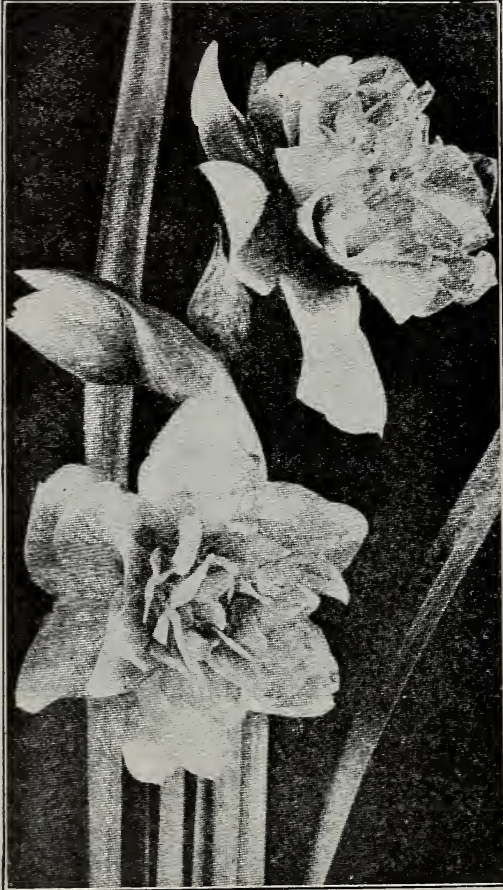
MATRIMONY VINE (*Lycium chinense*)—A rapid, coarse growing, woody, hardy climbing shrub with attractive leaves, handsome purple flowers, followed by a great crop of red berry clusters, remaining practically all winter. ABC.

WISTARIA, PURPLE (*Wistaria sinensis*)—Fine for pergola, porch or trellis; open foliage; drooping clusters of blue pea-shaped flowers. ABC.

WISTARIA, WHITE (*Wistaria sinensis alba*)—Like above except flowers are white and not hardy north. A.

Hardy Bulbs for Fall Planting Only

After the long winter months, our desire for color in the garden is keenest when late in March or early April, the Snowdrop, Crocus or Tulip raises its head from a crest of snow. All of the following bulbs must be planted in the fall for they can be wintered in no other way than in the ground and commence to grow before the frost is out, making spring transplanting impossible.

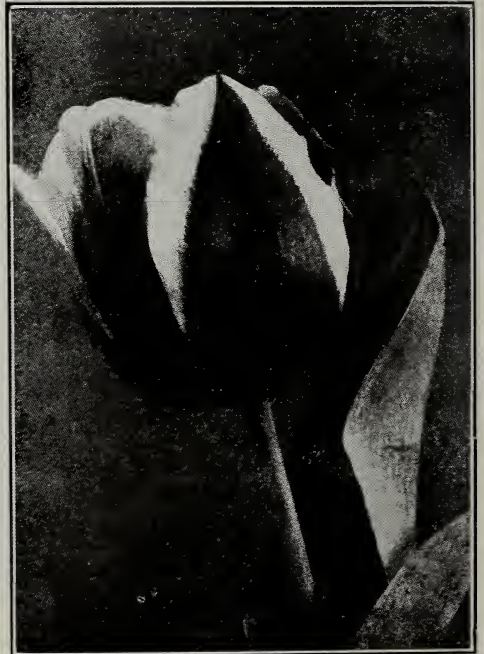


Narcissus

NARCISSUS—Including Jonquil, Daffodil and Poet's Narcissus. Jonquil is very slender and graceful, with fragrant yellow flowers; Daffodil is more variable as to form and ranges through colors of white and yellow; Poet's Narcissus is the tallest of the group and very popular on account of its hardiness. April and May.

SQUILL (Scilla)—Attractive, drooping, bell-shaped flowers on upright spikes somewhat like hyacinth. Must have partial shade. March and April. Blue. 5-9 in.

TULIP (Tulipa)—Best known and of easiest culture among all early spring flowering bulbs. By far the greatest demand is for the early single varieties, either in mixed colors or named sorts. These are rather dwarfish in habit and bloom during April. Of the larger, later and double types, we consider the Darwins the best because of its strong growth and unusually large bloom. The Darwins are at their best about two weeks after the early ones are gone. All colors, either mixed or separate.



Tulip

CROCUS—Large, funnel shaped flowers with extremely brilliant coloring in all shades of white, yellow, lavender and purple. March and April. 5 in.

SNOWDROP (Galanthus)—The first to unfold in the spring, with its gently drooping petals, often appearing before the snow is all gone. Pure white. March. 4-6 in.

HYACINTH (Hyacinthus)—Both the Dutch and Roman types are very desirable, the former having a single stalk well set with bloom, while the Roman has several more slender stalks less packed with flowers. Colors white, to shades of yellow, pink, lavender, red and purple. Late April and May. 8-15 in.

Flowering Bulbs for Spring Planting Only

Coming in the fall when many of the perennials are faded and gone, we must not forget the Canna, Dahlia and Gladiola, especially the Gladiola. They cannot be treated as the other bulbs or as perennials, as frost is fatal to the tubers. Dig them in the fall, before the ground freezes, store them in an ordinary cellar in shallow boxes. Don't let them freeze. Then plant them in the spring. If you wish to secure a longer bloom period, don't set them all out at once but plant a part each week or ten days during April and May.



Assorted Dahlias

CANNA—Their showy foliage in green and bronze, crowned by masses of yellow and red flowers display great attractiveness, rather too loud and glaring when planted with other flowers in the garden. The following varieties cover the combination color contrasts and are most desirable:

Chas. Henderson—Green foliage; crimson flowers. 4 ft.

Florence Vaughn—Green foliage; yellow flowers. 5 ft.

King Humbert—Bronze foliage; orange-red flowers. 4 ft.

Wyoming—Bronze foliage; yellow flowers. 7 ft.

DAHLIA—Very showy for late fall bloom; in great variety of form and colors; for ordinary planting, we suggest ordering mixed varieties; if special cactus forms are desired, they should always be ordered in named sorts. Two of the best cactus varieties are:

Countess of Lonsdale—Delicate lavender, shading to carmine pink. One of the great favorites.

Spotless Queen—Purest snow-white. Fine for cut flowers.

GLADIOLUS—First among the tender bulbs for tasty bloom among the fall cut flowers. Best planted in masses or beds. Plant four to five inches deep and they require no staking. Our list covers a wide range of colors including many of the newer and larger sorts.

Augusta—White, flecked with pink.

America—Delicate pink.

Francis King—Orange-scarlet.

Baron Hulot—Best purple.

Europa—A new, extra large and fine pure white.

Golden King—Handsome yellow.

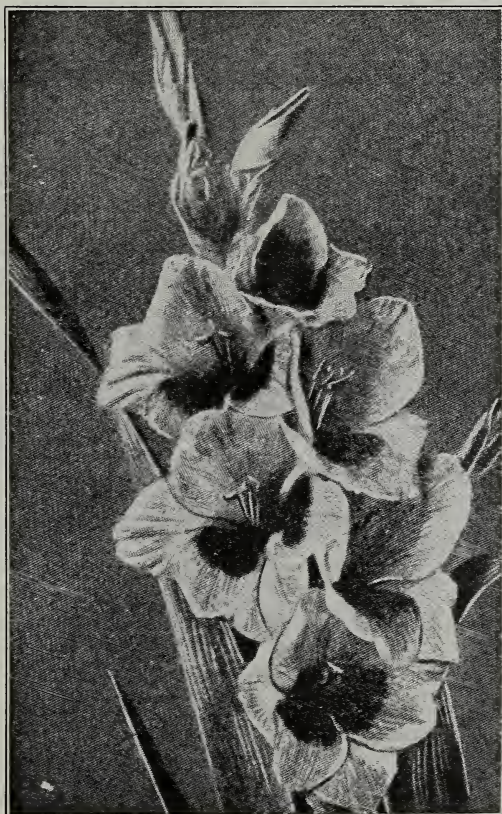
Mrs. Watt—Clear cerise.

Princes—Scarlet with white splotches.

Pendleton—Beautiful combination of red and white.

Panama—Large, clear, beautiful shell-pink.

Peace—A much larger and finer Augusta.



Gladioli

Hardy Perennials



Acres of peonies and perennials.

TO HAVE a really attractive lawn or garden, you need perennials. Plant more of them. From earliest spring till the last day of fall, you may have beauty in all the various colors. Being hardy, they come up again each spring in their accustomed places, with larger and more satisfying flowers each succeeding year. Since perennials are more readily recognized by their botanical names and in order to avoid the confusion of the great variety of common names often applied to the same plant, our perennials are listed alphabetically according to their trade terms. If you want something not listed, write us. We have a great assortment in our experiment grounds and borders and shall be glad to advise and to divide up with you.

ACHILLEA, THE PEARL (Yarrow or Milfoil)—Small, double white flowers covering the plant during July and August. 1 ft. ABC.

ACONITUM, AUTUMNALE (Monkshood or Aconite)—Erect growing, palmate foliage; deep blue flower spikes in September and October. Roots poisonous. 4 ft. ABC.

ALTHEA, ROSEA (Hollyhocks)—King of the garden for tall background. Magnificent single or double flowers in mixed or separate colors; red, yellow, white and pink. All summer. 6 ft. ABC.

ALYSSUM SAXATILE (Gold Dust)—Clear golden yellow flowers, fragrant and very showy; fine for the edge of the border or along walks. May. 1 ft. ABC.

ANEMONE, JAPONICA (Windflower)—Very large flowers $2\frac{1}{2}$ inches in diameter; bright purplish rose with yellow centers; in great profusion from September till November. One of the finest for late fall. $2\frac{1}{2}$ ft. ABC.

ANEMONE, WHIRLWIND—Even more popular than the type. A great profusion of double white flowers during September and October. $2\frac{1}{2}$ ft. ABC.

AQUILEGIA, CANADENSE (Wild Columbine)—Native to our woods where it is better known as Wild Honeysuckle. Scarlet flowers, intermingled with yellow. May and June. 18 in. ABC.

AQUILEGIA, CHRYSANTHA (Golden Spurred Columbine)—Larger flower than canadense; bright yellow, fragrant. Prefers partial shade and appreciates a slight winter covering. May to July. 2 ft. AB.

AQUILEGIA, CAERULEA (Rocky Mountain Columbine)—Flowers large, blue and white, long spurs. June. 2 ft. ABC.

BOLTONIA ASTEROIDES (False Chamomile)—Large white flowers, tinged with pink. September. 4-5 ft. ABC.

CAMPANULA, CARPATICA (Carpathian Harebell)—Dwarf habit, flowers deep blue. June to September. 9 in. ABC.

CAMPANULA, MEDIA (Canterbury Bell)—Flowers large, cup-and-saucer form; colors blue, rose and white. Generally dies out after blooming the second season, therefore should be treated as a biennial. June and July. 2-3 ft. AB.

CAMPANULA, PERSICIFOLIA—Broad, single, purple, bell-shaped flowers along a tall flower-spike. June and July. 2-3 ft. ABC.



Dianthus Plumarius

CHRYSANTHEMUM LEUCANTHEMUM (Shasta Daisy)—Large, white flowers, blooming throughout the summer. Very fine in beds or in the border, especially desirable for edging. Very showy; entirely hardy. June to October. 18 in. ABC.

CHRYSANTHEMUM POMPOM—Coming into bloom very late in the fall with a lavish profusion of bloom in various colors, the pom-poms take an important place in the garden. Fine cut flowers even after heavy frost. September to November. 2 ft. ABC.

HARDY ASTERS (Michaelmas Daisies)—Nothing is more beautiful in fall than a mass of these hardy daisies; taller than Shasta; in colors blue, pink and white. August to November. 2-4 ft. ABC.

CONVALLARIA, MAJALIS (Lily of the Valley)—Luxuriant foliage; flowers small, bell shaped, in pretty racemes, very fragrant. Recommended only for shade places. May and June. 6 in. ABC.

COREOPSIS GRANDIFLORA (Tickseed)—Large, pure yellow flowers, very showy and free blooming; from June till frost; fine for cutting; one of the hardiest. 1-3 ft. ABC.

DELPHINIUM, FORMOSUM—This is the old larkspur with more erect stem and more compact flowers. Grows taller than belladonna; blue, tinged with purple, white eye. July and August. 3-4 ft. ABC.

DELPHINIUM, BELLADONNA HYBRIDUM (Hardy Larkspur)—Here are found the richest and most variable shades of blue and white in the flower kingdom; we consider the larkspur one of the most lovable of all flowers and the belladonna hybrids the best and most practical for the ordinary garden. July till frost if flowers are cut when mature. 3 ft. ABC.

DIANTHUS BARBATUS (Sweet Williams)—Among the most esteemed of the old-fashioned flowers, producing a great variety of colors. July till September. 6-12 in. ABC.

DIANTHUS PLUMARIUS (Scotch Pinks)—Pink, purplish and white fragrant flowers. Handsome, glaucous green foliage. In bloom all the time if flowers are cut off when they begin to fade. 9-12 in. ABC.

DICENTRA SPECTABILIS (Bleeding Heart)—Another of the old favorites, with heart-shaped, rose colored flowers in loose, drooping racemes. Prefers partial shade and rather moist soil for best foliage effect. May to July. 2 ft. ABC.

DIGITALIS (Foxglove)—A tall growing biennial with very thick, mullen-like leaves and a grand display of thimble shaped flowers in colors purple, white and various. July and August. 2-3 ft. ABC.

FESTUCA (Fescue Grass)—Dwarf, silvery-blue grass, often used with good effect in the edge of the border. ABC.

FUNKIA SUBCORDATA (White Day or Plantain Lily)—Wide circles of broad leaves; flowers large, waxy-white, borne in great trusses. Very fragrant. Recommended for shady places. June. 18 in. ABC.

GAILLARDIA SUPERBA (Blanket Flower)—It is truly surprising to note the number of nursery visitors unacquainted with this attrac-



Gaillardia Superba

tive, long flowering perennial. Few leave without ordering a dozen or more. Plant a dozen Gaillardia and you will have handsome, red and yellow cut flowers every day from June till diameter on long upright stems. Center deep purplish-red, thickly bordered with petals of frost. Flowers often measure three inches in orange and yellow, ringed by circles of bright red. June till November. 20 in. ABC.

Hardy Perennials—Continued



Iris Germanica

GAILLARDIA KESMERIA SPLENDENS—

Even larger and more attractive than the above though not quite as free blooming with us. June to October. 20 in. ABC.

GYPSOPHILA PANICULATA (Baby's Breath)

—Flowers small, white, in large fleecy panicles during July and August. Fine for borders and bouquets. Invaluable for planting with oriental poppy to cover the bare places in the border after the poppies finish blooming. 2-3 ft. ABC.

HEMEROCALLIS FULVA (Yellow Day Lily)—

One of the fine hardy plants. Flowers large, golden yellow, lily-shaped and very fragrant. June till August. 2 ft. ABC.

HIBISCUS (Mallows)—A bold, handsome flower, similar in habit to Hollyhock, though far more refined. Flowers large, single, red, white and variegated; one of the best known is Crimson Eye. Moist soil preferred. July till October. 4 ft. ABC.

IBERIS (Candytuft)—Nearly evergreen, spreading habit; flowers pure white, nearly hiding plant; fine for border. Requires some winter protection. April and May. 8 in. AB.

IRIS KAEMPFERI (Japanese Iris)—Larger, later and more showy than the German Iris, though very shy blooming with us. Can supply in limited assortment. June and July. 18-24 in. ABC.

IRIS, GERMANICA (Fleur de Lis or Flag)—It is so easy to have Iris! Inexpensive, absolutely hardy and practically no care—there surely is a border or corner or out-of-the-way place in your garden where a few Iris will well repay you. Below we list a few select varieties of German Iris, all blooming during May and June; two feet tall; hardy in ABC.

Black Prince—Rich, dark purple.

Florentine—White, tinged with lilac.

Honorabilis—Yellow, veined crimson-brown.

Jacquesinia—Dull, coppery crimson.

L 'Avenier—Beautiful light lavender.

Madam Chereau—White, frilled with violet.

Sampson—Rich, golden yellow.

IRIS, SIBERIAN—Deep blue flowers in clusters, on long stems. June and July. 3 ft. ABC.

LIATRIS (Blazing Star)—Very striking. Great rocket-like spikes of pale purple flowers. August till October. 3-5 ft. AB.

LILIUM (Lily)—Queen among the perennials. A stately, refined flower of great charm, with blooming periods varying from May till October. Many of the lilies form two sets of roots, the feeding roots five or six inches above the bulb and unless these varieties are planted deep, the feeders are too near the surface. That's why so many fail to bloom. The Tiger, Canadian and Madonna lilies need not be planted more than five inches deep but all other sorts should be at least nine inches deep. All should be set in sand for better drainage and no manure should ever come in contact with the roots. Spray with Lime-sulphur or Bordeaux at intervals during the growing period. Plant in fall and you may get good results from all the following varieties:

Auratum (Gold Banded Lily)—One of the tallest; with the largest flowers; pure white, thickly spotted with red and with a bright golden band through the center of each petal. This is the most difficult in the list to grow. ABC.

Canadense (Canadian Lily)—A reliable and valuable native of easy garden culture. Bright, orange-red flowers from June till August on long, arching stems, two feet high. ABC.

Candidum (Madonna Lily)—Handsomest white and most attractive of the hardy lilies. If planted in the background of a clump of larkspur, you have one of the most classic and beautiful combinations of the garden. June and July. 3-4 ft. ABC.

Longiflorum (Easter Lily)—Pure white with faint shade of green at base. Large and fragrant. July and August. 3 ft. ABC.

Speciosum Rubrum (Red Japan Lily)—Large, nearly red, thrifty and free blooming. August and September. 3 ft. ABC.

Tigrinum (Tiger Lily)—Orange-red, spotted with black or purple dots. Hardest and best of the tall growing sorts. July and August. 4 ft. ABC.

LOBELIA CARDINALIS (Cardinal Flower)—Spikes of brilliant red flowers. Recommended for low, wet places. August and September. 2-3 ft. ABC.

Phlox

PHLOX, PANICULATA (Hardy Phlox)—For midsummer and early fall flowers, the hardy phlox is unquestionably the most satisfactory and the most permanent. Their bright and various colors, delicious fragrance, continual bloom during all the hot, trying weather of July and August, fill a place in the garden that would be bare indeed without them. Plant in masses, in the border, in beds, or in rows along the walks and drives. In our collection we offer some of the very choicest new sorts:

American Beauty—Fine, purplish-red.

Anton Mercie—Very handsome, light violet.

B. Comte—Pink border with purple center.

Champ Elysee—Dark purplish-crimson.

Eclaeur—Bright, purplish-rose, light center.

Elizabeth Campbell—Salmon pink, crimson eye.

Eugene Danzenvillier—Pale lilac, white center.

Frau Anton Buchner—Dwarf white, large flowers.

F. G. Von Lassburg—Dwarf white, large heads.

Gefion—Very fine, light pink.

Henri Merger—Large white, red center.

Jeanne d' Arc—Pure white, late flowering.

LaNige—Pure white dwarf.

Miss Lingard (Suffruticosa)—Finest early white.

Mrs. Jenkins—Tallest pure white.

Richard Wallace—White, with crimson eye.

R. B. Struthers—Bright, dark red.

Rynstrom—Rose Pink, very large.

W. C. Egan—Salmon pink, red center.

PAPAVER, ORIENTALIS (Oriental Poppy)—Gorgeous and glorious when in bloom from May till July. Immense flaming flowers of orange scarlet to white. 2 ft. ABC.



Oriental Poppy

PAPAVER, NUDICALE (Iceland Poppy)—Should be treated as an annual or biennial. Pretty white and yellow flower on slender, drooping stalk. Reseeds itself readily. Blooms from April till September except during July. 1 ft. ABC.



Oriental and Iceland Poppies and other perennials



Phlox Paniculata

Hardy Perennials—Continued



Golden Glow

RUDBECKIA LACINIATA FL. PL. (Golden Glow)—Tall, showy plant; flowers large, double, deep golden yellow. Fine for cutting. July till September. 6 ft. ABC.

SALVIA (Perennial Sage)—Bright blue in great profusion during August and September. Very desirable. 2-3 ft. ABC.

SEDUM SPECTABILE (Stonecrop)—Low-branching, with foliage similar to live-forever; showy clusters of rosy-purple flowers. August till October. 18 in. ABC.

SOLIDAGO (Golden Rod)—Our national wild flower found growing in the prairie meadows. Large branching panicles of bright, golden yellow. July till September. 4 ft. ABC.

STOKESIA (Stoke's Aster)—A native specie producing large, beautiful, sky-blue flowers like China Aster. August till frost. 18-24 in. ABC.

TRITOMA (Flame Flower)—Splendid late blooming plant with flower spikes three to four feet high, of rich orange-red. Requires winter protection. July till September. 4 ft. AB.

VALERIANA (Garden Heliotrope)—Small white to lavender flowers in loose panicles. June. 18 in. ABC.

YUCCA FILAMENTOSA (Spanish Bayonet or Adam's Needle)—Long, narrow, evergreen leaves, with tall flower stem covered with large, bell-shaped flowers of pure white. Very effective in clumps on the lawn or in the border. July 3-4 ft. ABC.



Peony Bushes, Assorted Colors



Peony time at our nursery. No picture can do this block justice. Seven hundred dozen choice flowers were gathered in one hour for the Red Cross. Still there were plenty of flowers left.

Peonies

"May and June are always associated with their rich and variable colors and delightful fragrance. And when it comes to cut flowers—they are incomparable!"

Everyone can have peonies. Once established in rich soil they practically take care of themselves and bloom every year about Decoration day—large, handsome flowers as fine, delicate and fragrant as the rose and far more reliable.

Fall planting is by far the best. Then you have bloom the first season. Plant thirty inches apart in open sunlight, the buds on the roots three to four inches below the surface of the ground, enrich the soil with well rooted manure in late fall or winter and your peonies will never disappoint you.

Practically all peonies are hardy so far as the root stock is concerned, but many sorts are tender in the bud and while they grow vigorously, do not bloom after winter injury to the bud. We list varieties which bloom here in nursery every year, covering the very best selection in the middle-west.

ALEXANDER DUMAS—Light, rosy-pink, mingled with narrow petals of creamy-white. Early mid-season.

ALICE CROUSSE—Bright pink with nearly white center. Mid-season.

BARONESS SCHROEDER—Large, round, white, very fine. Not so free blooming as F. Maxima. Mid-season.

BELLE CHATELAINE—White, with slight touch of violet. Very attractive. Mid-season.

COURONNE d' OR—Finest late mid-season white; center petals bordered with carmine; yellow stamens.

DELACHI—Deep purple, crimson reflex; one of the darkest reds; late.

EDUOARD ANDRE—Magnificent brilliant crimson. Mid-season.

FELIX CROUSSE—Brilliant red with unusually center. Very fine. Mid-season.

FESTIVA MAXIMA—By far the best early white; center petals flecked crimson. One of the most attractive flowers for the border or garden. Early.

FRANCIS ORTEGAT—Rich, dark, semi-double; red. Red peonies are scarce in early mid-season when this variety blooms.

FULGIDA—Dark red with silvery tips. Mid-season.

FRINGE LEAF—Very early. Two weeks ahead of all other reds except *officinalis rubra*. Foliage very finely fringed.

GOLDEN HARVEST—The finest variegated peony, covering the greatest variety of colors in a single bloom. Center petals pink, center pure white, carmine tipped. Mid-season.

GRANDIFLORA—Uniform rose-white. Very late.

GRANDIFLORA ALBA—Straw color, fading to pure white.

Hardy Perennials—Continued



A closer view of peonies in bloom.

GRANDIFLORA NIVEA PLENA—Large, pure white, very early.

GROVER CLEVELAND—Rich, dark crimson, beautiful rose-shaped buds. Very fine. In color, fragrance and form it compares favorably with the finest roses. Mid-season.

HUMEI—Cherry pink with silvery tips; drooping stems. One of the old favorite pinks. Late.

LaCOQUETTE—A pretty combination of bright rose and salmon pink. Mid-season.

LaTULIP—Lilac white; outer guard striped crimson. Large and fine. Late mid-season.

MARIE LEMOINE—Pure white, with cream white center. The finest late white. Flowers cut from our Marie Lemoine on July 1st, kept in perfect shape in the office vase till July 10th.

MAGNIFICA—Fleshy white, creamy white center; very large. Mid-season.

MEISSONIER—Dark, reddish-purple. Similar to Grover Cleveland in color, form and fragrance. Mid-season.

MIKADO—Japanese single; dark, fiery crimson, with gold tipped center. Best red single peony. Late mid-season.

MONSIEUR DUPONT—Milk white; center splashed with crimson. Mid-season.

MONSIEUR JULES ELIE—Shell pink, yellow center; its delicacy of bud and bloom equals the finest roses. The handsomest pink. Early mid-season.

OFFICINALIS ALBA—Ten days earlier than Festiva Maxima or any other white listed. Plant a few so as to be sure to have peonies on Decoration Day, even during a very late spring season.

OFFICINALIS RUBRA—Brilliant crimson; in all other respects similar to officinalis alba.

PAGININI—Not generally listed by other growers but one of the finest for color. White, overlaid with pale lilac. Very fine. Late mid-season.

QUEEN VICTORIA—Fleshed tinted white, with crimson specks in center. Mid-season.

RUBRA SUPERBA—The best late red. Deep rose-crimson to purple; very fine purple buds; most prolific of all peonies to bloom; the best red cut-flower peony. Very late.

RUBRA TRIUMPHANS—Large, very dark crimson. Early mid-season.

SOLFRATARE—Nearest yellow. Handsome sulphur-yellow or straw color. Mid-season.

SOUVENIR—On account of its fine silvery reflex, Souvenir is classed with the pinks though its color is really a clear cherry red. Late mid-season.

TRIOMPHE—Pale, hydrangea pink, splashed with red, guard petals changing to nearly white. Very fine. Mid-season.

WHITE JAPAN—Nursery visitors during the peony season marvel at the gorgeous display of this large, pure white, single peony, with yellow center. Blooms in clusters, single flowers often measuring eight inches across. Very attractive. Mid-season.

Evergreens



A bed of pines at the left ready for transplanting into open field. Three year seedling Norway Spruce transplanted under shade.



INTER and summer, but especially during the long winter months, there is nothing more comforting about the home than the evergreen. Whether planted in rows for shelter or windbreak; dotted about the house and yard; or dwarfs used in porch and foundation planting; there is nothing to give more life and tone to the winter scenery.

For windbreaks, a single row of pines or spruce is often used, planted eight feet apart in the row; but a better plan is to set a double row; pine in outside row and spruce on the inside, breaking joints with the pines, the rows ten feet apart and trees eight feet apart in the rows. This soon becomes a living wall of green; protection from the winter blasts; a sign of taste and refinement about the home; and a big asset to the value of the property.

Specimen trees of the finer sorts, near the house or in the borders of the lawn, relieve the home of its barren aspect during the late fall, winter and early spring. You will never tire of your evergreens, once you get them established.

In handling and planting, never allow the roots to become dry or exposed to the sun or air. That's deadly. Their sap is resinous and once hardened, no amount of moisture will dissolve the resin. Dip the roots in thin mud as soon as unpacked; leave them there till the last minute before setting out, then, if you use no water at planting, you must tamp the earth about the roots as firm as when setting a post. Remember, evergreens are always in full leaf, evaporation is going on constantly, and unless firmly established when planted, the wind will work them loose, destroy the young root hairs and permit the air to get down to the roots. Cultivate once a week till July 1st, then mulch heavily with straw, lawn clippings or litter, to keep the ground moist and cool during the hot days of July and August. Never sprinkle the tops of your evergreens.

ARBOR VITAE, AMERICAN (*Thuja occidentalis*)—Beautiful, dwarfish pyramidal form; flat foliage. A good low screen for sheltered places. Not entirely hardy. Fine for clippings. 25 ft.

ARBOR VITAE, GLOBE (*Thuja globosa*)—Round, globular form without trimming. Fine for formal garden work and for porch decoration. Half hardy. 10 ft.

ARBOR VITAE, GOLDEN (*Thuja Hoveyi*)—Yellowish-green foliage. Half hardy. 20 ft.

ARBOR VITAE, PYRAMIDALIS (*Thuja oc. pyramidalis*)—A beautiful upright evergreen of compact, erect habit, forming a column similar to Irish Juniper. Half hardy. 25 ft.

ARBOR VITAE, TOM THUMB—Foliage resembling Juniper. Very dwarf habit. Hardy. 4 ft.

FIR-BALSAM (*Abies balsamea*)—Brighter, heavier needles than spruce; attractive while young; aromatic fragrance. Must have partial shade in this latitude. Half hardy. 35 ft.

FIR, COLORADO (*Abies concolor*)—Very fine, silvery green foliage but very difficult to establish. Half hardy. 30 ft.

FIR, NORDMAN'S (*Abies Nordmanniana*)—Large needles, dark green throughout the year. Very stately and handsome. Difficult to establish. Half hardy. 30 ft.

JUNIPER, AMERICAN (*Juniperus canadensis*)—A dwarf Juniper of bushy, upright growth. Fine for foundation planting with shrubs. 5 ft.

JUNIPER, EUROPEAN (*J. communis*)—More spreading than American; otherwise much like it. Hardy. 4 ft.

JUNIPER, IRISH (*J. Hibernica*)—Very dense, upright growth. Fine for cemetery planting. Half hardy. 12 ft.

RED CEDAR (*J. virginiana*)—Tapering and symmetrical; bronze foliage in fall and early winter. Hardy but no longer recommended for windbreak because it harbors Cedar Rust, destructive to the apple crops in surrounding orchards. 25 ft.

JUNIPER, SAVIN (*J. Sabina*)—A low, wide-spreading, thickly branched evergreen shrub, fine for foundation and border. Hardy. 4 ft.



Evergreens ready for the windbreak. Twice transplanted; with the last three years spent in open field, without shade.

JAPAN CEDAR, PEA-FRUITED CYPRESS (*Retinispora pisifera*)—Fine, feathery foliage, new growth steel-blue color. Very distinct. Half hardy. 15 ft.

JAPAN CEDAR, PLUME CYPRESS (*Retinispora plumosa*)—Very compact growth with feathery, blue-green foliage. Half hardy. 15 ft.

PINE, AUSTRIAN (*Pinus Austriaca*)—A very intense, heavy, dark green foliage; large, coarse needles; very rugged, vigorous growth. Much handsomer than Scotch. Hardy. 35 ft.

PINE, DWARF (*Pinus montana mugho*)—Very dark green foliage; low, spreading though compact growth. Fine for foundation and clump planting. Hardy. 4 ft.

PINE, SCOTCH (*Pinus sylvestris*)—A rapid growing tree, handsome when young; yellow bark and inclined to break down when older. Hardy. 35 ft.

PINE, WHITE (*Pinus strobus*)—The best pine for tall windbreaks. A handsome, graceful, fine-neededled, American variety with smooth green bark. Very rapid growth. Stands transplanting better than any other pine. Quarantined against shipment west of the Missouri River. Hardy. 40 ft.

SPRUCE, BLACK HILLS (*Picea canadensis*)—A handsome slow-growing native spruce from the Dakotas. Very compact, with blue-green foliage. Hardy. 30 ft.

SPRUCE, COLORADO BLUE (*Picea pungens*)—The most popular, ornamental evergreen by reason of its handsome, shelving habit of growth and beautiful blue foliage. Hardy. 35 ft.

SPRUCE, DOUGLAS (*Picea Douglasi*)—Dull green foliage. Very handsome. Difficult to establish. Half hardy. 40 ft.

SPRUCE, ENGELMAN'S (*Picea Engelmannii*)—Slow growth; dense regular form. Somewhat more difficult to transplant than Colorado Blue. Hardy. 40 ft.

HEMLOCK (*Tsuga canadensis*)—Native; loose and open growth; extremely graceful. Should have partial shade. Fine for underplanting with larger evergreens. Half Hardy. 25 ft.

SPRUCE, KOSTER'S BLUE (*Picea pungens glauca*)—The grafted form of Colorado Blue. Grafted to secure uniformity of color, height and shape. Not quite as reliable as Colorado Blue. Hardy. 30 ft.

SPRUCE, NORWAY (*Picea excelsa*)—The most popular windbreak evergreen. Bears transplanting well; fairly rapid grower. Hardy. 35 ft.

SPRUCE, WHITE (*Picea alba*)—Native of our northern timber. Foliage lighter shade of green than Norway; more difficult to grow and therefore not as popular as Norway Spruce for windbreaks. Hardy. 40 ft.

YEW, AMERICAN (*Taxus canadensis*)—Low, spreading, bushy form; very dark green, flat needles. Fine for foundation planting, especially in partial shade. Small red berries. Fairly hardy. 4 ft.

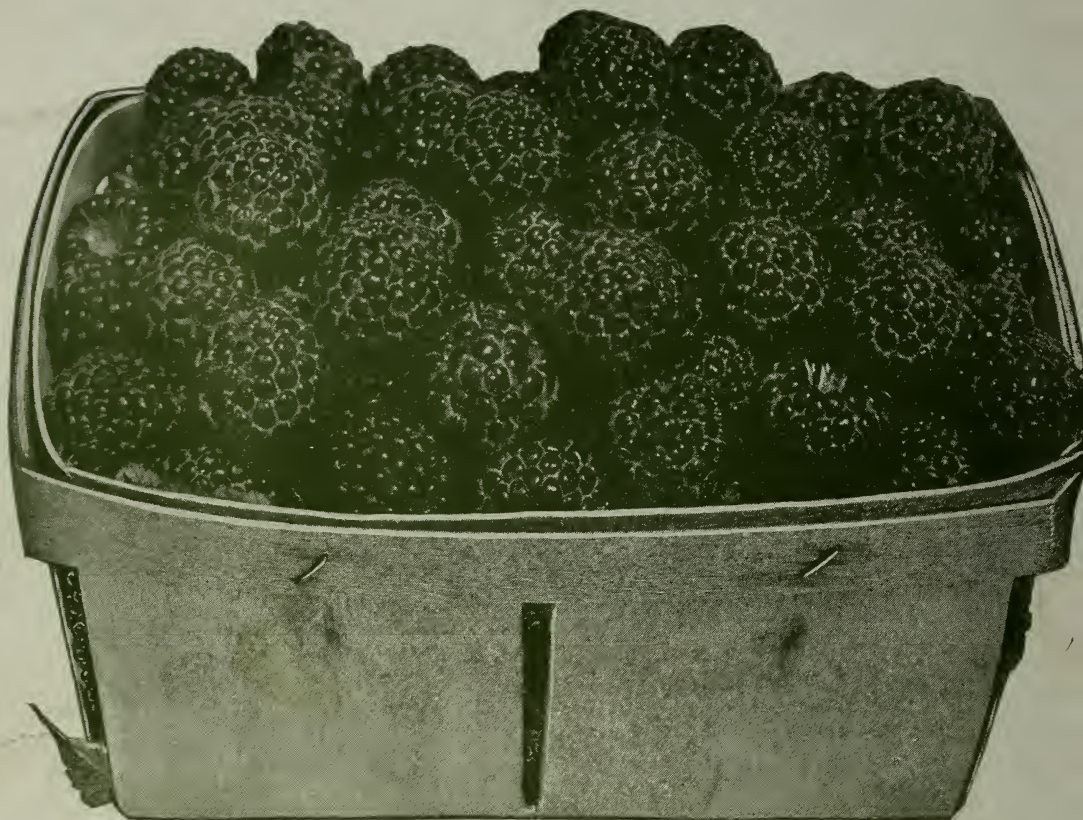
YEW, JAPANESE (*Taxus cuspidata*)—More upright than American and possibly a little better able to withstand a sunny exposure. Hardy. 5 ft.



White Pine

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CUMBERLAND RASPBERRIES

SEE PAGE 20



CAPITAL CITY NURSERIES

SINCE 1869

DES MOINES, IOWA